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**1984**

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**BMW 528e/533i**

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**Electrical**

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**Troubleshooting**

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**Manual**

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BMW of North America, Inc.  
Montvale, New Jersey

## **FOREWORD**

In the interests of continuing technical development work we reserve the right to modify designs and equipment.

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May 1984

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**1984  
BMW 528e/533i  
Electrical  
Troubleshooting  
Manual**

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The purpose of this manual is to show electrical schematics in a manner that makes electrical troubleshooting easier. Electrical components which work together are shown together on one schematic. The Wiper-Washer schematic, for example, shows all of the electrical components in one diagram. At the top of the page is the fuse (positive) that powers the circuit. The flow of current is shown through all wires, connectors, switches, and motors to ground (negative) at the bottom of the page.

Within the schematic, all switches and sensors are shown "at rest," as though the Ignition Switch were off. For identification, component names are underlined and placed next to or above each component. Notes are included, describing how switches and other components work.

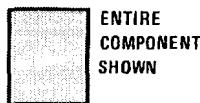
The power distribution schematic shows the current feed through all the connections from the Battery and Alternator to each fuse and the Ignition and Light Switches. If the Power Distribution schematic is combined with any other circuit schematic, a complete picture is made of how that circuit works. The Ground Distribution schematics show how several circuits are connected to common grounds.

All wiring between components is shown exactly as it exists in the vehicle; however, the wiring is not drawn to scale. To aid in understanding electrical operation, wiring inside complicated components has been simplified. The "Solid State" label designates electronic components.

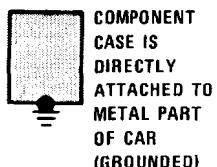
WIRE SIZE CONVERSION CHART	
METRIC (CROSSECTIONAL AREA IN MM <sup>2</sup> )	AWG (AMERICAN WIRE GAUGE)
.5	20
.75	18
1	16
1.5	14
2	14
2.5	12
4	10
6	8
8	8
16	4
20	4
25	2
32	2

WIRE INSULATION	
ABBREVIATIONS	COLOR
BK	BLACK
BR	BROWN
RD	RED
YL	YELLOW
GN	GREEN
BU	BLUE
VI	VIOLET
GY	GRAY
WT	WHITE
PK	PINK

## 4 SYMBOLS



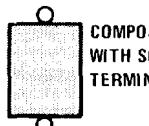
ENTIRE  
COMPONENT  
SHOWN



COMPONENT  
CASE IS  
DIRECTLY  
ATTACHED TO  
METAL PART  
OF CAR  
(GROUNDED)



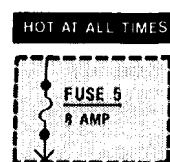
PART OF A  
COMPONENT  
SHOWN



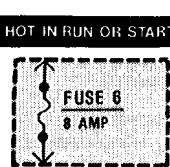
COMPONENT  
WITH SCREW  
TERMINALS



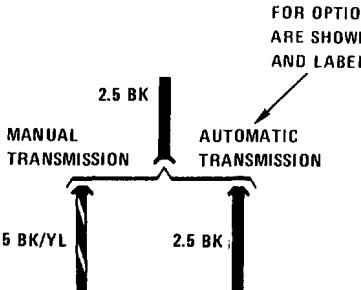
SOLID STATE  
(INCLUDES ONLY  
ELECTRONIC PARTS)



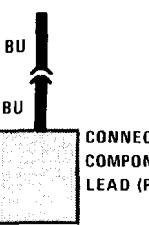
HOT AT ALL TIMES  
INDICATES THAT FUSE 5  
IS ALWAYS SUPPLIED  
WITH POWER



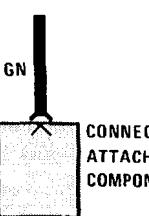
HOT IN RUN OR START  
INDICATES THAT FUSE 6  
IS SUPPLIED WITH POWER  
WITH THE IGNITION  
SWITCH IN THE RUN OR  
START POSITIONS



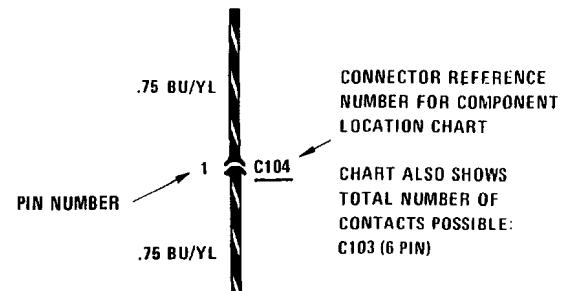
WIRE CHOICES  
FOR OPTIONS  
ARE SHOWN  
AND LABELED



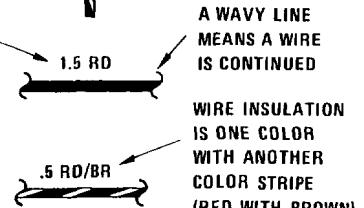
.5 BU  
CONNECTOR ON  
COMPONENT  
LEAD (PIGTAIL)



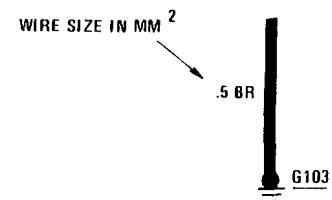
.8 GN  
CONNECTOR  
ATTACHED TO  
COMPONENT



CONNECTOR REFERENCE  
NUMBER FOR COMPONENT  
LOCATION CHART  
CHART ALSO SHOWS  
TOTAL NUMBER OF  
CONTACTS POSSIBLE:  
C103 (6 PIN)

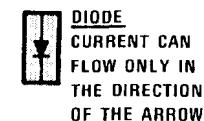


A WAVY LINE  
MEANS A WIRE  
IS CONTINUED  
WIRE INSULATION  
IS ONE COLOR  
WITH ANOTHER  
COLOR STRIPE  
(RED WITH BROWN)



WIRE SIZE IN MM<sup>2</sup>  
.5 BR  
G103  
WIRE IS ATTACHED TO  
METAL PART OF CAR  
(GROUNDED)  
GROUND IS NUMBERED  
FOR REFERENCE ON  
COMPONENT LOCATION CHART

OTHER CIRCUITS THAT SHARE  
A GROUND ARE SHOWN  
IN GROUND DISTRIBUTION



DIODE  
CURRENT CAN  
FLOW ONLY IN  
THE DIRECTION  
OF THE ARROW

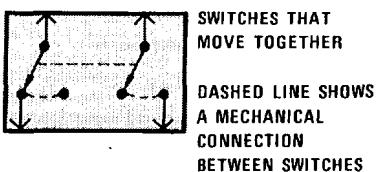
CIRCUIT REFERENCE –  
A WIRE WHICH CONNECTS  
TO ANOTHER CIRCUIT



ACTIVE CHECK CONTROL

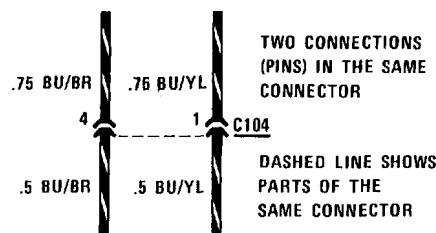


ONE POLE,  
TWO POSITION  
SWITCH

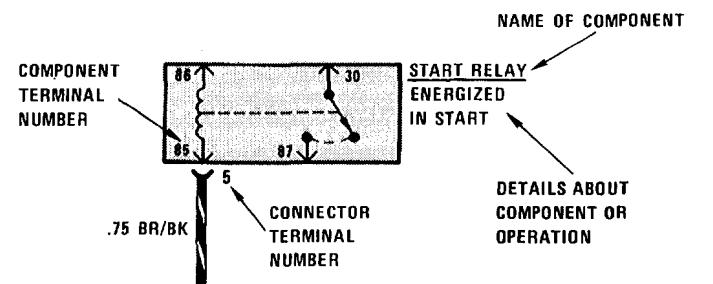


SWITCHES THAT  
MOVE TOGETHER

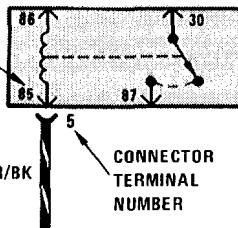
DASHED LINE SHOWS  
A MECHANICAL  
CONNECTION  
BETWEEN SWITCHES



.75 BU/BR .76 BU/YL  
4 1 C104  
.5 BU/BR .5 BU/YL  
DASHED LINE SHOWS  
PARTS OF THE  
SAME CONNECTOR



COMPONENT  
TERMINAL  
NUMBER



.75 BR/BK  
5  
CONNECTOR  
TERMINAL  
NUMBER

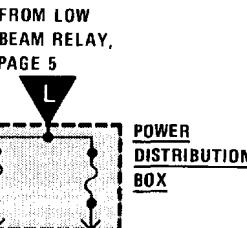
NAME OF COMPONENT

START RELAY  
ENERGIZED  
IN START

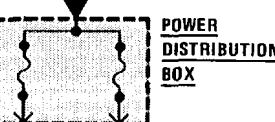
DETAILS ABOUT  
COMPONENT OR  
OPERATION



2.5 YL  
TO POWER  
DISTRIBUTION  
BOX, PAGE 1

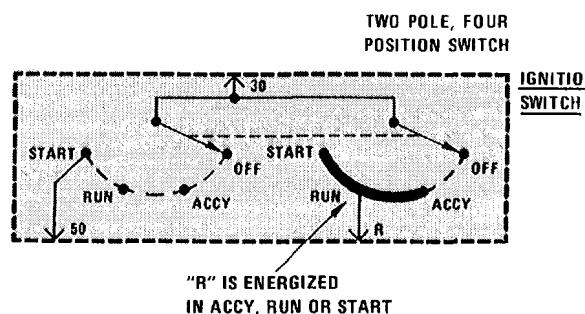


FROM LOW  
BEAM RELAY,  
PAGE 5

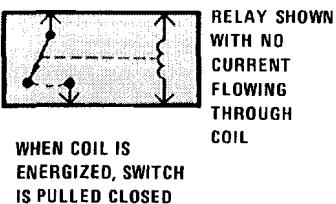


POWER  
DISTRIBUTION  
BOX

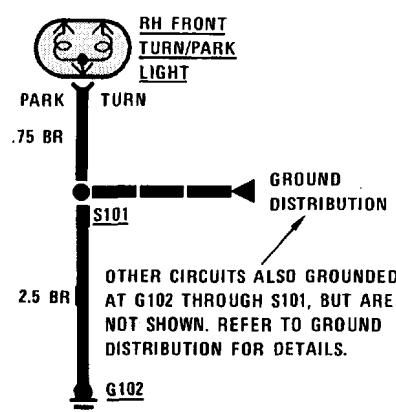
CURRENT PATH  
IS CONTINUED  
AS LABELED.  
THE ARROW SHOWS  
DIRECTION OF CURRENT  
FLOW AND IS REPEATED  
WHERE CURRENT  
PATH CONTINUES.



IGNITION  
SWITCH  
START  
RUN  
OFF  
ACCY  
RUN  
OFF  
ACCY  
"R" IS ENERGIZED  
IN ACCY, RUN OR START



WHEN COIL IS  
ENERGIZED, SWITCH  
IS PULLED CLOSED



RH FRONT  
TURN/PARK  
LIGHT  
PARK TURN  
.75 BR  
S101  
2.5 BR  
G102  
GROUND  
DISTRIBUTION  
OTHER CIRCUITS ALSO GROUNDED  
AT G102 THROUGH S101, BUT ARE  
NOT SHOWN. REFER TO GROUND  
DISTRIBUTION FOR DETAILS.



LIGHT  
EMITTING  
DIODE

## 6 SYSTEMATIC TROUBLESHOOTING

### TROUBLESHOOTING PROCEDURE

#### 1. Verify the Problem

Operate the problem circuit to check the accuracy of the complaint. Note the symptoms of the inoperative circuit.

#### 2. Analyze the Problem

Refer to the schematic of the problem circuit in the ETM. Determine how the circuit is supposed to work by tracing the current path(s) from the power feed through the circuit components to ground. Then based on the symptoms you noted in step 1 and your understanding of circuit operation, identify one or more possible causes of the problem.

#### 3. Isolate the Problem

Make circuit tests to prove or disprove the preliminary diagnosis made in step 2. Keep in mind that a logical simple procedure is the key to efficient troubleshooting. Test for the most likely cause of failure first. Try to make tests at points which are easily accessible.

#### 4. Repair the Problem

Once the specific problem is identified, make the repair using the proper tools and safe procedures.

#### 5. Check the Problem

Operate the circuit to check for satisfactory circuit operation. Good repair practice calls for rechecking all circuits you have worked on.

### TROUBLESHOOTING TOOLS

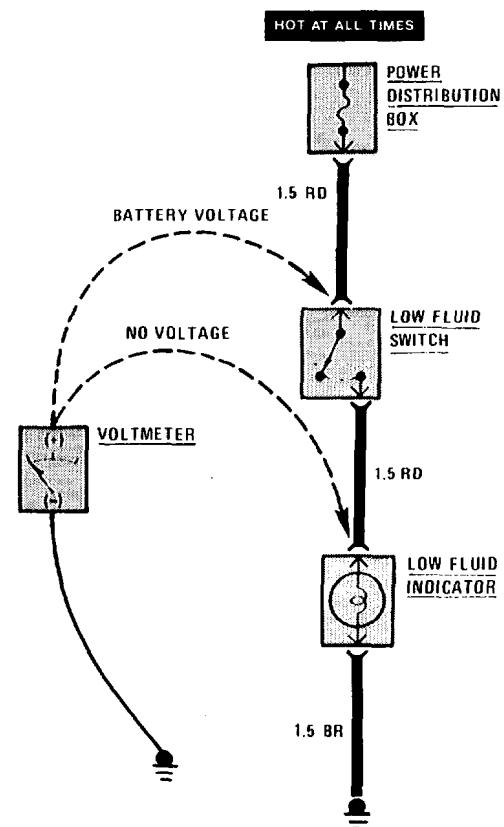
Isolating the problem (Step 3 of TROUBLESHOOTING PROCEDURES) requires the use of a **voltmeter** and/or **ohmmeter**. A voltmeter measures voltage at selected points in a circuit. An ohmmeter measures a circuit's resistance to current flow. It has an internal battery that provides current to the circuit under test. Disconnect the car battery when using an ohmmeter because the battery voltage will cause the ohmmeter to give false readings. Also, do not use an ohmmeter on solid-state components. The voltage that the ohmmeter applies to the circuit could damage these components.

### TROUBLESHOOTING TESTS

#### Voltage Test

This test measures voltage in a circuit. By taking measurements at several points (terminals or connectors) along the circuit, you can isolate the problem.

To take a voltage measurement, connect the negative lead of the voltmeter to the battery's negative terminal or other known good ground. Then connect the positive lead of the voltmeter to the point you want to test. The voltmeter will measure the voltage present at that point in the circuit.

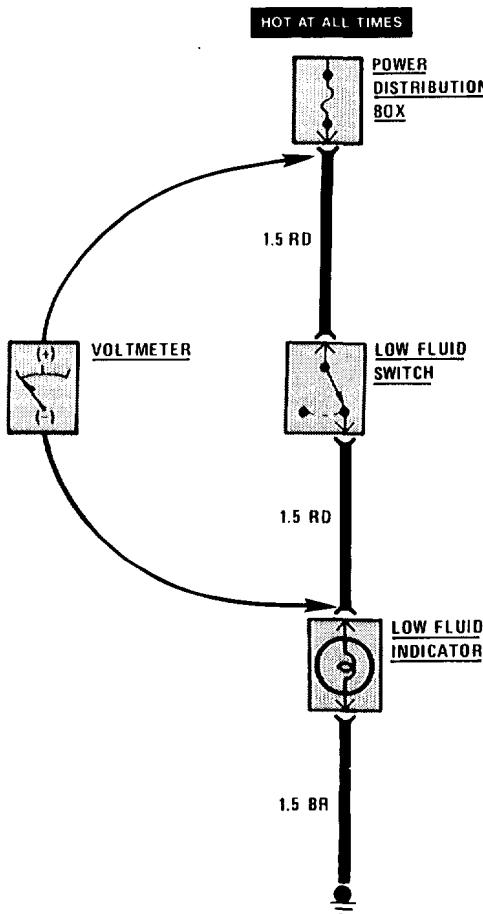


Voltage Test

## Voltage Drop Test

Wires, connectors, and switches are designed to conduct current with a minimum loss of voltage. A voltage drop of more than one volt indicates a problem.

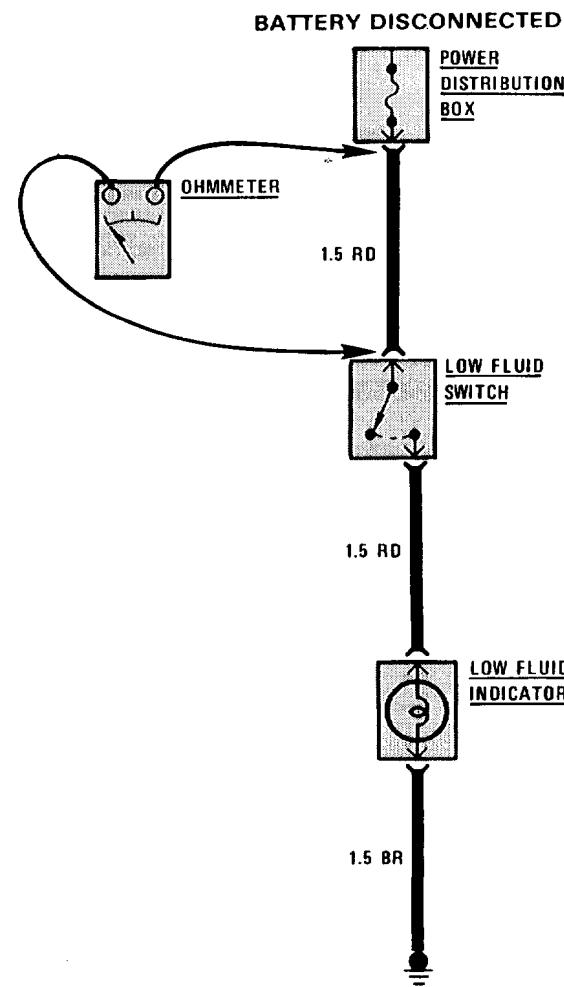
To test for voltage drop, connect the voltmeter leads to connectors at either end of the circuit's suspected problem area. The positive lead should be connected to the connector closest to the power source. The voltmeter will show the voltage drop between these two points.



**Voltage Drop Test**

## Continuity Test

To perform a continuity test, first disconnect the car battery. Then adjust the ohmmeter to read zero while holding the leads together. Connect the ohmmeter leads to connector or terminals at either end of the circuit's suspected problem area. The ohmmeter will show the resistance across that part of the circuit.

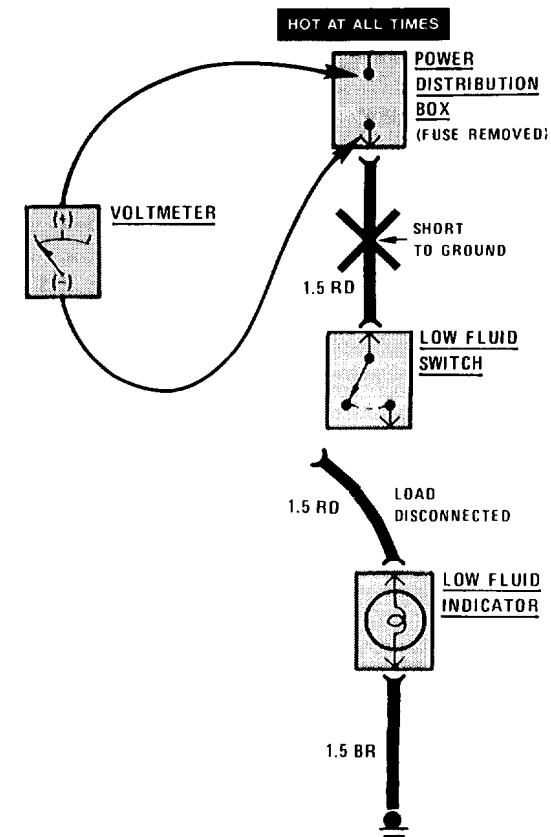


**Continuity Test**

## Short Test Using Voltmeter

Remove the blown fuse and disconnect the load. Connect the voltmeter leads to the fuse terminals. The positive lead should be connected to the terminal closest to the power source.

Starting near the **POWER DISTRIBUTION BOX**, move the wire harness back and forth and watch the voltmeter reading. If the voltmeter registers a reading, there is a short to ground in the wiring. Somewhere in the area of the harness being moved, the wire insulation is worn away and the circuit is grounding.



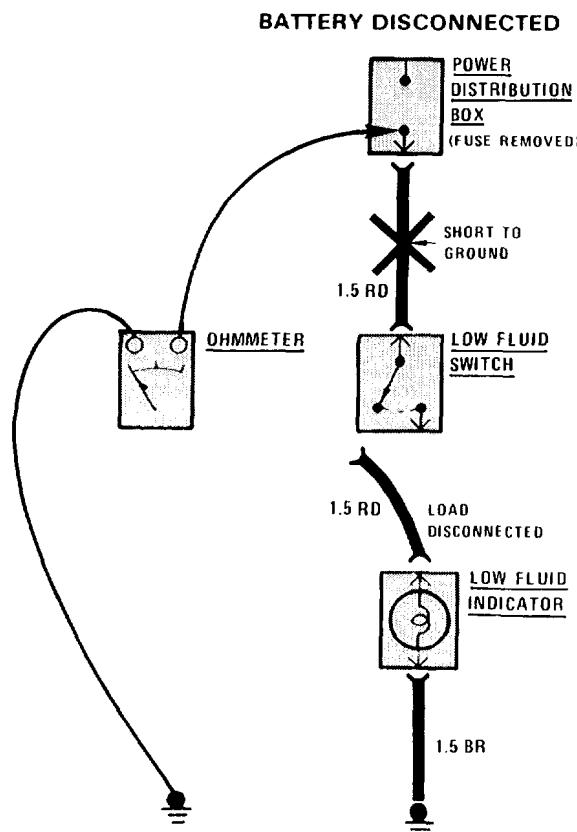
**Short Test Using Voltmeter**

## **8 SYSTEMATIC TROUBLESHOOTING**

### **Short Test Using Ohmmeter**

Disconnect the battery. Adjust the ohmmeter to read zero while holding the leads together. Remove the blown fuse and disconnect the load. Connect one lead of the ohmmeter to the fuse terminal that is closest to the load. Connect the other lead to a known good ground.

Starting near the POWER DISTRIBUTION BOX, move the wire harness back and forth and watch the ohmmeter reading. Low or no resistance indicates a short to ground in the wiring. Infinitely high resistance indicates no short.



**Short Test Using Ohmmeter**



**NOTE**

On some cars, the position of the side mounted relays may be interchanged on their respective sides. Check relay wire colors for positive identification.

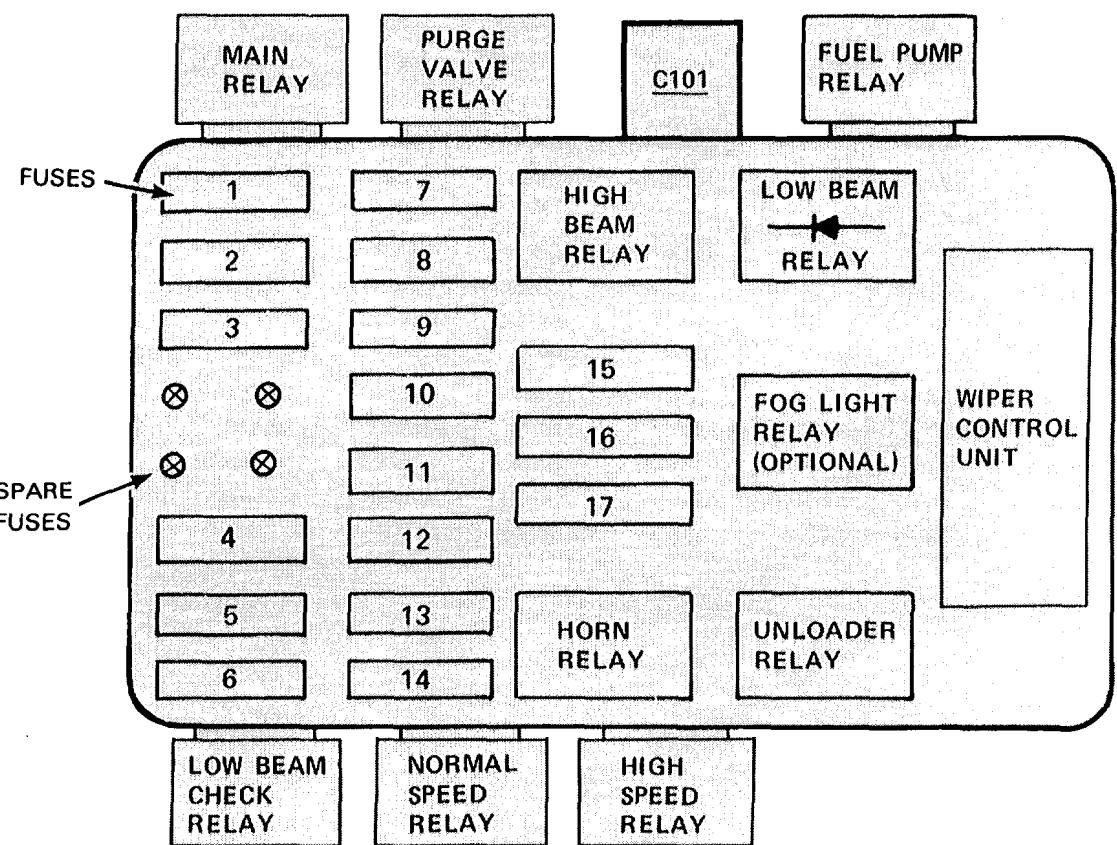


Figure 1 - Top Of Left Front Wheel Well

FUSE NO.	SIZE/COLOR	CIRCUIT NAME
1	16A (RD)	Fuel Delivery/Evaporative Control.
2	8A (WT)	Active Check Control (also fuse 5, 6, 9, 10, 11, 12); Headlights (RH Low Beam).
3	8A (WT)	Active Check Control (also fuses 5, 6, 9, 10, 11, 12); Headlights (LH Low Beam).
4	25 (BU)	Cigar Lighter. Active Check Control (also fuses 2, 3, 6, 9, 10, 11, 12); Central Locking; Gauges (also fuse 6); Glove Box Light; Heated Door Lock;
5	8A (WT)	Ignition Key Warning/Seatbelt Warning (also fuse 6); Interior Lights (also fuse 6); Lights: Turn/Hazard Warning (also fuse 11); Lights: Trunk; Auto-Charging Flashlight; Auto-Charging Flashlight; On-Board Computer (also fuses 6, 12); Radio/Power Antenna (also fuses 4, 12); Service Interval Indicator (also fuse 6).
		Active Check Control (also fuses 2, 3, 5, 9, 10, 11, 12); Back Up Lights/Transmission Range Lights; Brake Lining Warning; Cruise Control (also fuse 12); Dash Lights (also fuse 9, 14); Fog Lights (also fuses 15, 16); Gauges (also fuse 5); Heater/Air Conditioning (also fuse 14);
6	8A (WT)	Idle Speed Control; Ignition; Interior Lights (also fuse 5); On-Board Computer (also fuses 5, 12); Power Mirrors; Power Windows (also Power Window Circuit Breaker); Seatbelt Warning (also fuse 5); Service Interval Indicator (also fuse 5); Speedometer; Warning Indicators (also fuse 15).
7	8A (WT)	Headlights (RH High Beams).

FUSE NO.	SIZE/COLOR	CIRCUIT NAME
8	8A (WT)	Headlights (LH Low Beams).
9	8A (WT)	Active Check Control (also fuses 2, 3, 5, 6, 10, 11, 12); Dash Lights (also fuses 6, 14); Lights: Front Park/Front Marker/Tail; Lights: Rear Marker/License.
10	8A (WT)	Active Check Control (also fuse 2, 3, 5, 6, 9, 11, 12); Lights: Front Park/Front Marker/Tail.
11	16A (RD)	Active Check Control (also fuse 2, 3, 5, 6, 9, 11, 12); Lights: Turn/Hazard Warning (also fuse 5); Wiper/Washer and Heater Washer Jets.
12	8A (WT)	Active Check Control (also fuses 2, 3, 5, 6, 9, 10, 11); Cruise Control; Radio (also fuses 4, 5); Stoplights; On-Board Computer (also fuses 5, 6); Power Antenna (also fuses 4, 5).
13	25A (BU)	Rear Defogger; Sunroof.
14	25A (BU)	Auxiliary Fan (also fuse 17); Dash Lights (also fuses 6, 9); Heater/Air Conditioning (also fuse 6).
15	8A (WT)	Fog Lights (RH).
16	8A (WT)	Fog Lights (LH).
17	25A (BU)	Auxiliary Fan (also fuse 14).
Power Window Circuit Breaker	25A	Power Windows (also fuse 6).

## 104 DIAGNOSTIC CONNECTOR

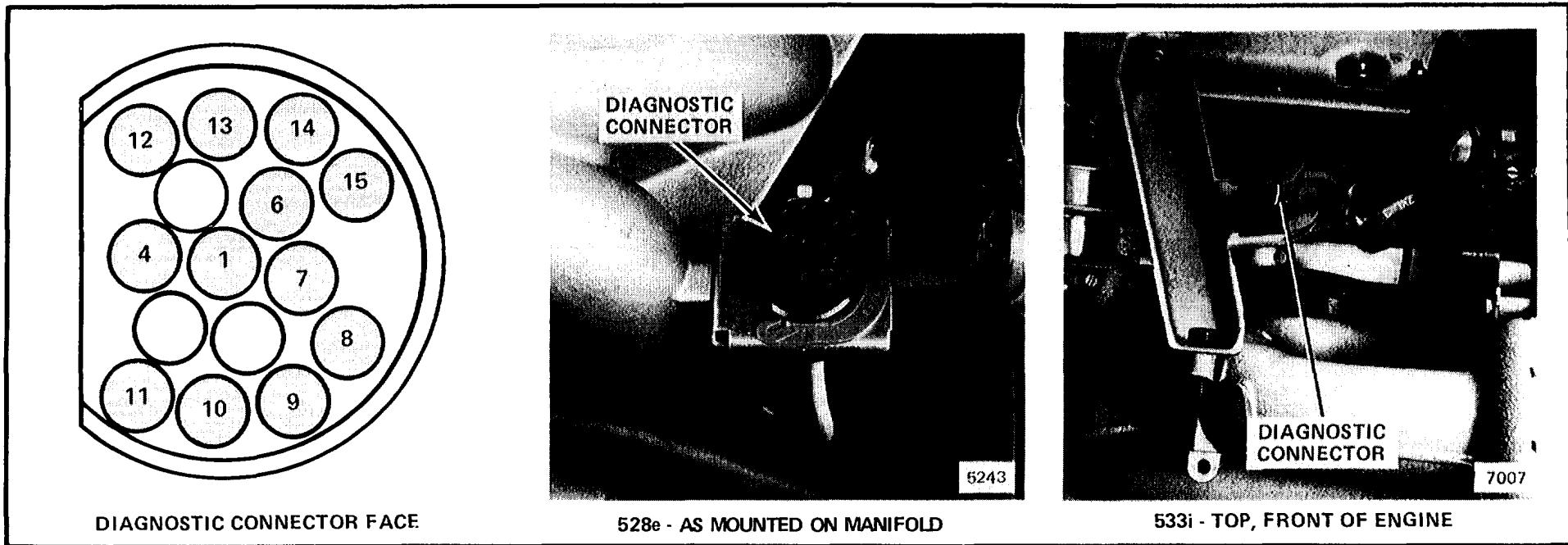
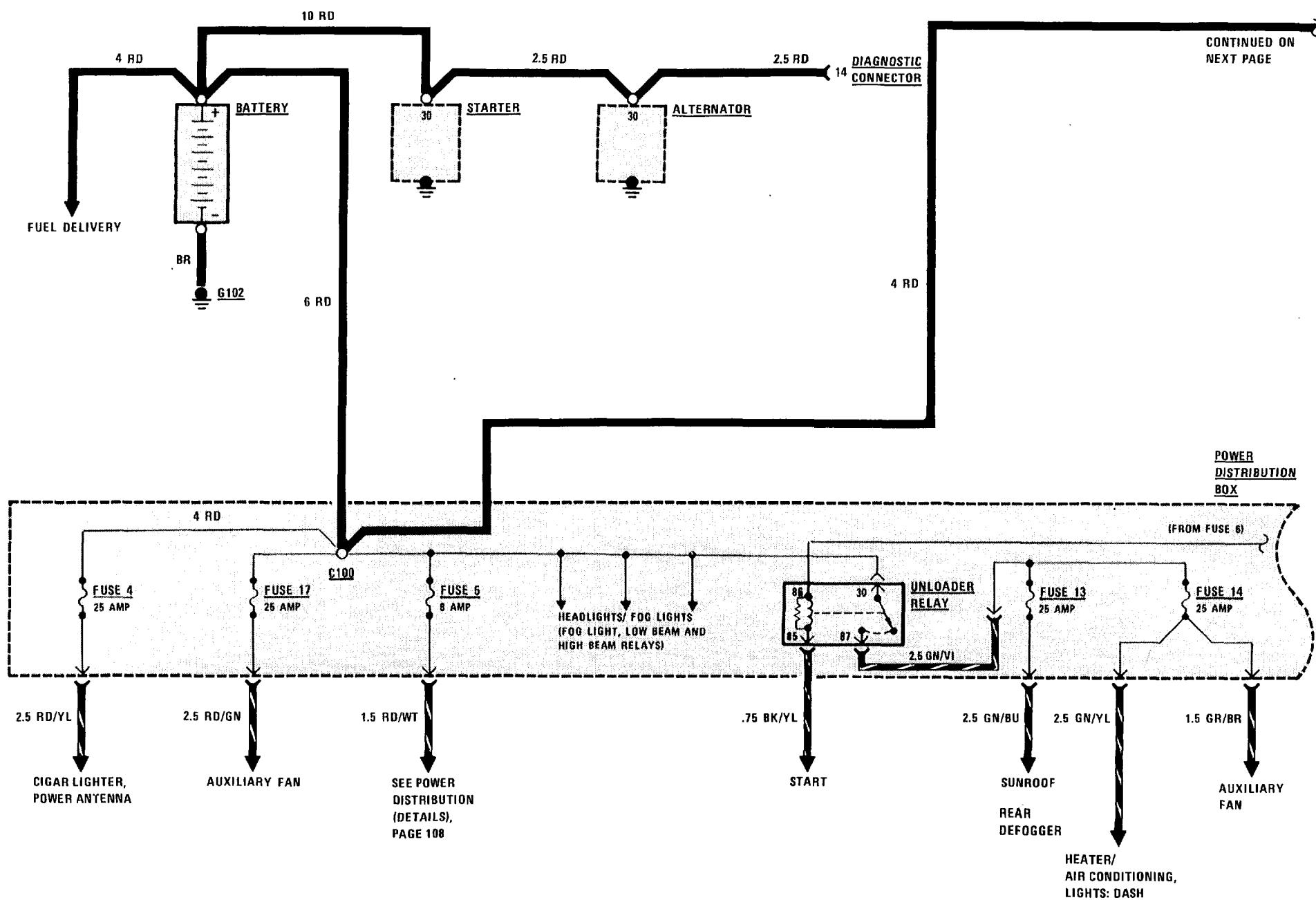


Figure 1 - Top Of Engine

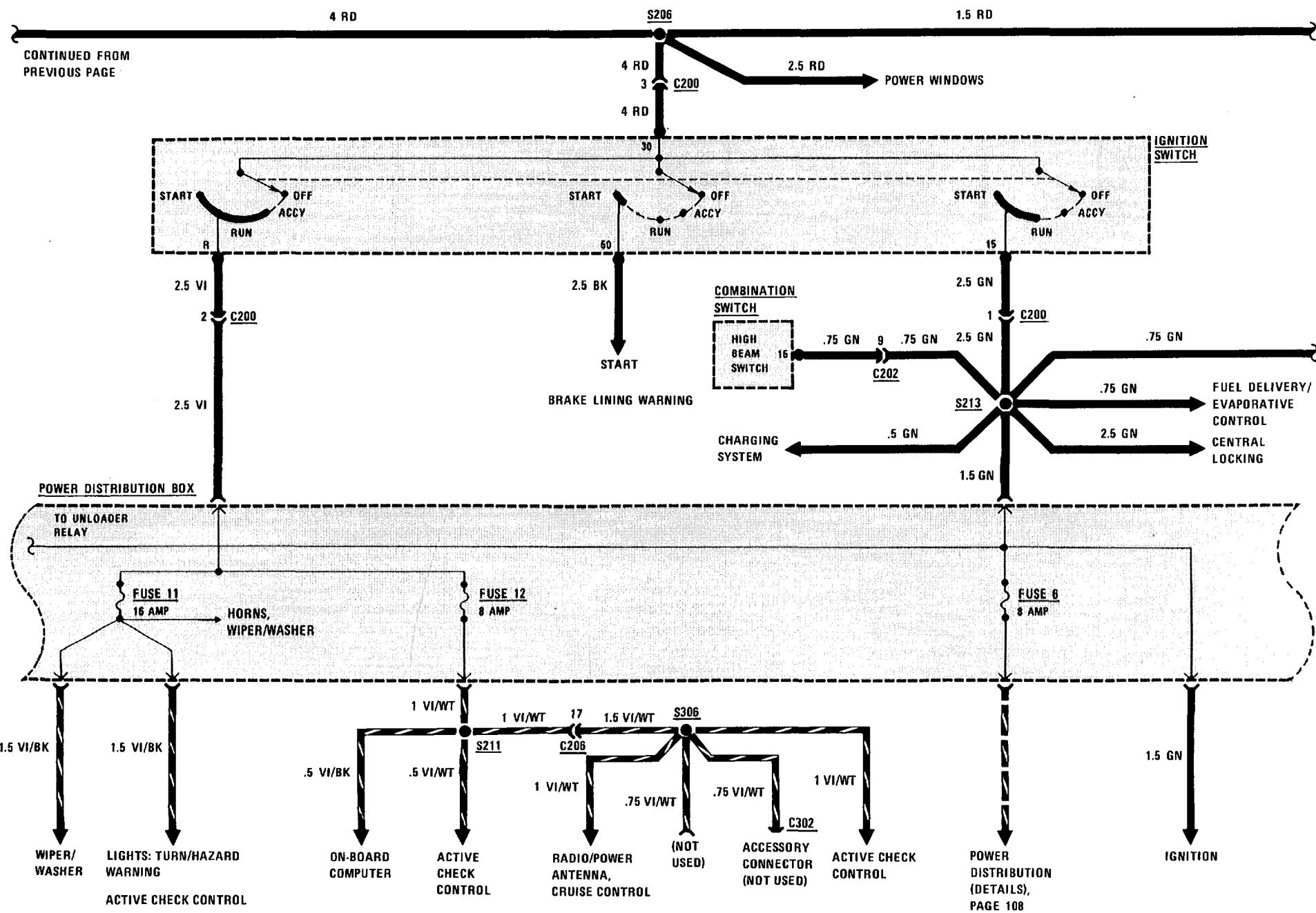
PIN	WIRE SIZE	WIRE COLOR	CIRCUIT AND COMPONENT CONNECTED
1	.5	BR	Ground Distribution, G103
4	.5	BR/VI	Gauges/Warning Indicators, Coolant Temperature Sender.
6	.5	WT/BK	Not Used
7	.5	WT/BU	Service Interval Indicator, Service Interval Processor (Reset).
8	.5	YL	Ignition, TDC Sensor.
9		SHIELD	Ignition, TDC Sensor.
10	.5	BK	Ignition, TDC Sensor.
11	2.5	BK/YL	Start, Start Signal.
12	.75	BU	Charge System, Alternator..
13	1	GN	Ignition, Ignition Coil.
14	2.5	RD	Charge System, Alternator.
15	1.5	GN/YL	Idle Speed Control, Idle Speed Control Unit.

(For Component Locations See Page 210)

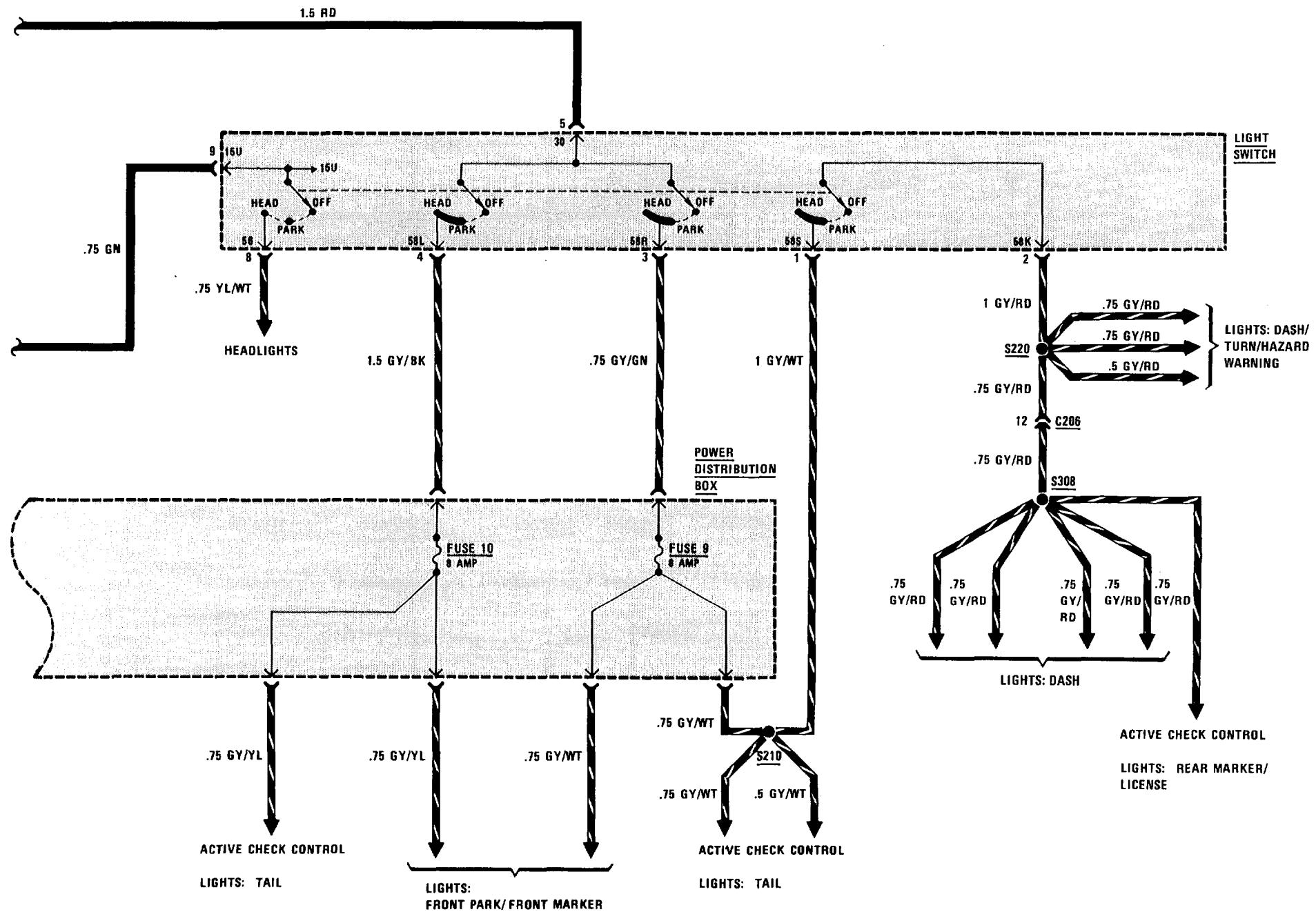


# 106 POWER DISTRIBUTION

(For Component Locations See Page 210)

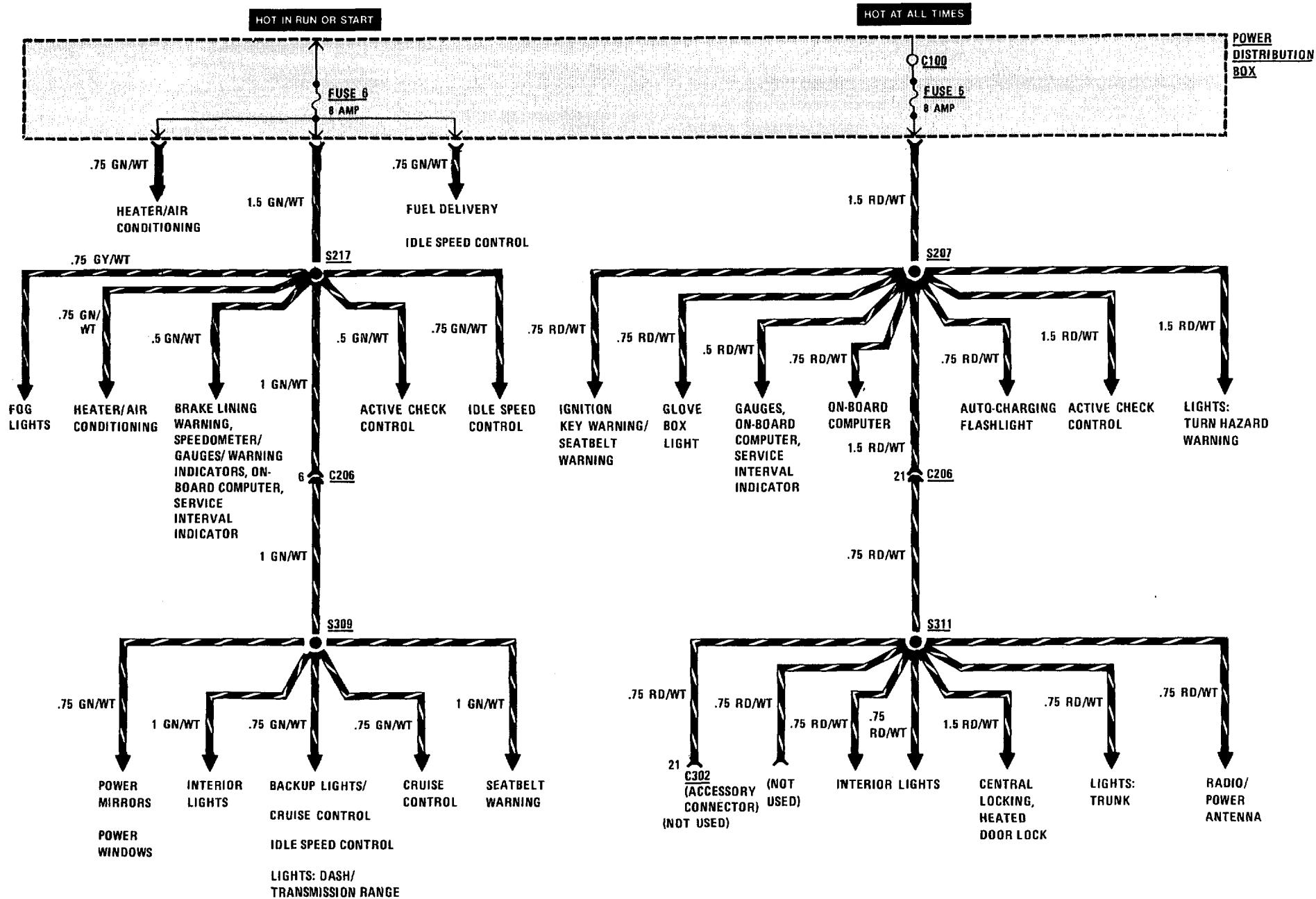


(For Component Locations See Page 210)

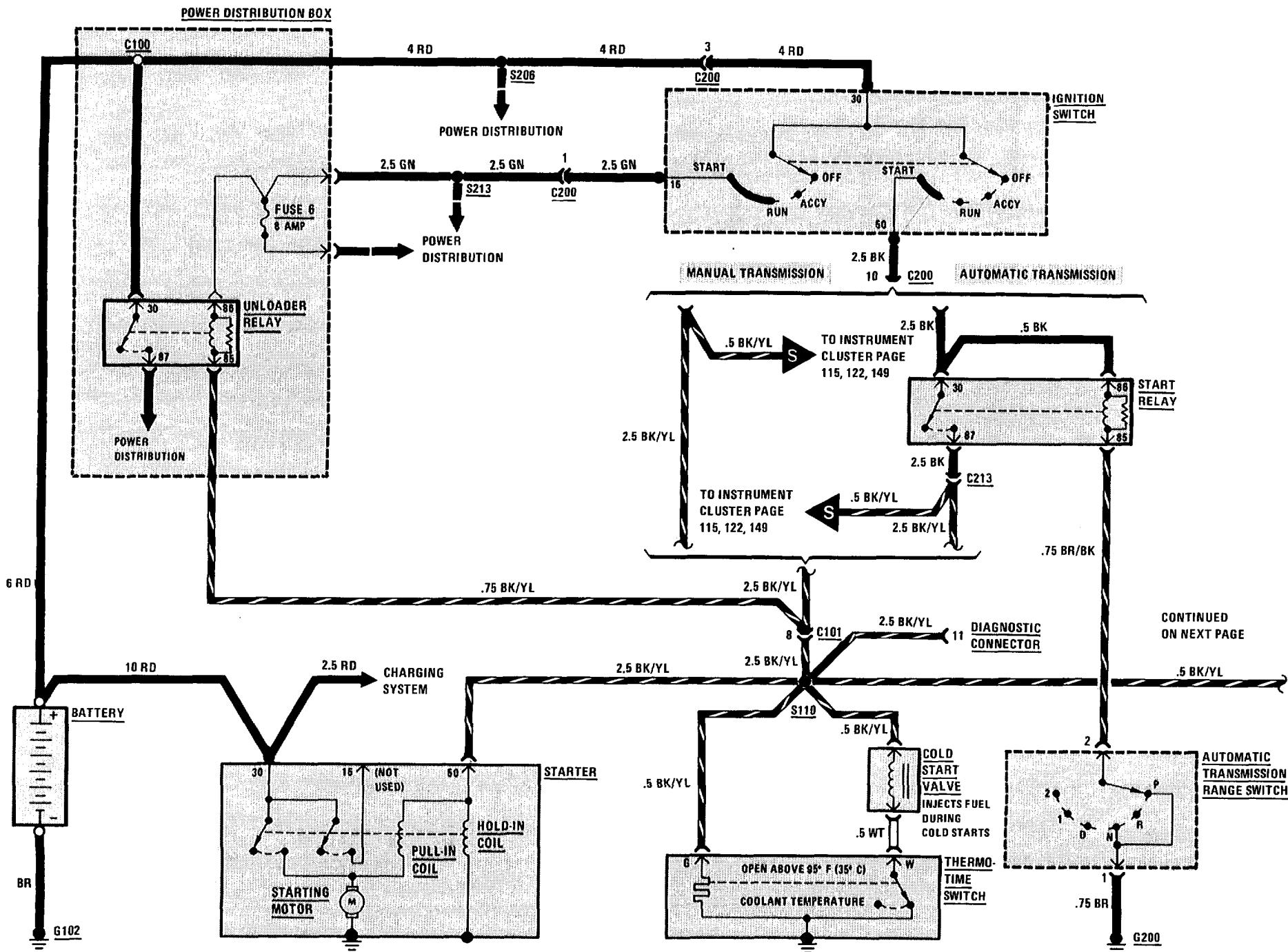


# 108 POWER DISTRIBUTION (DETAILS)

(For Component Locations See Page 210)

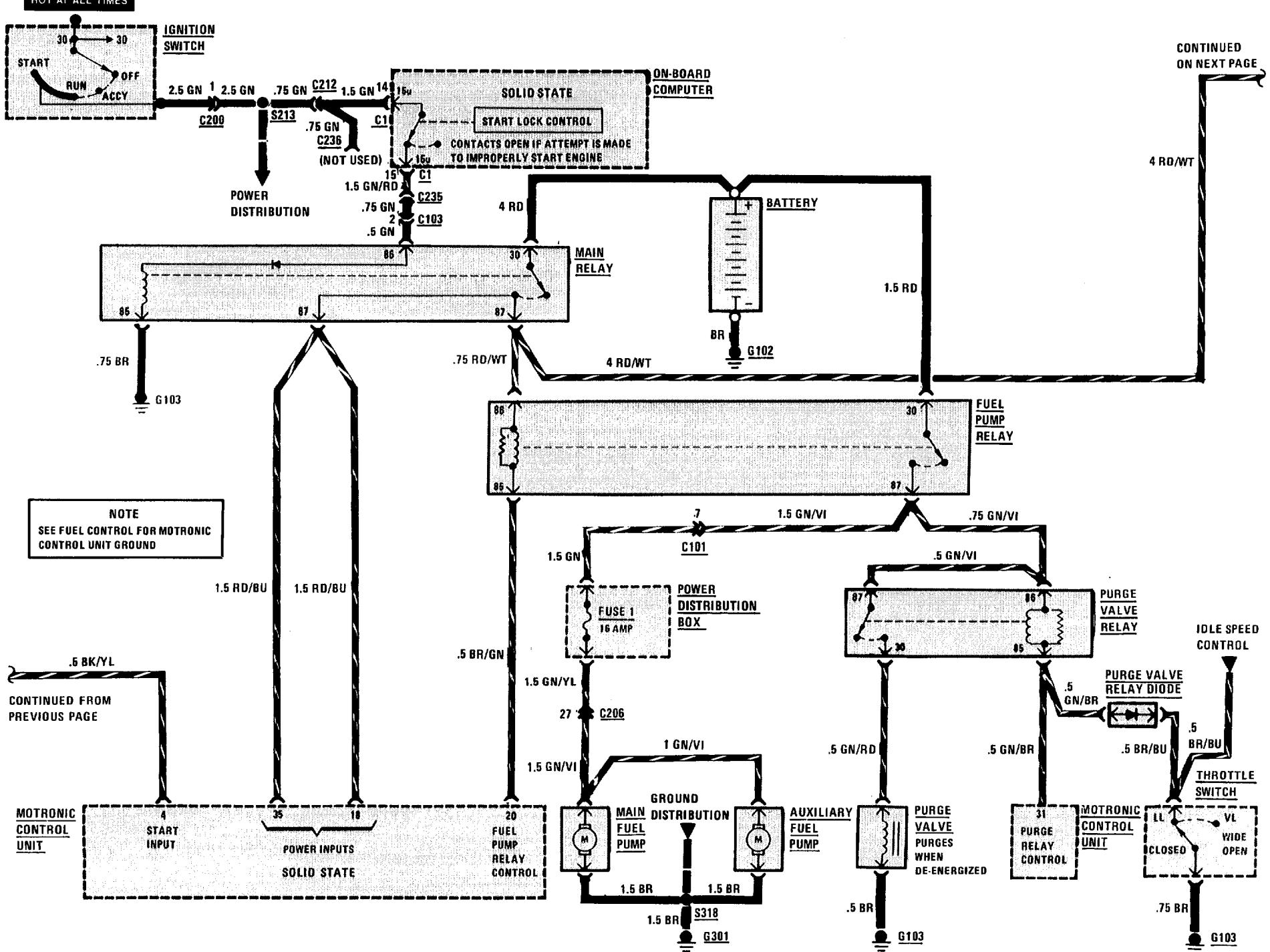


(For Component Locations See Page 217)

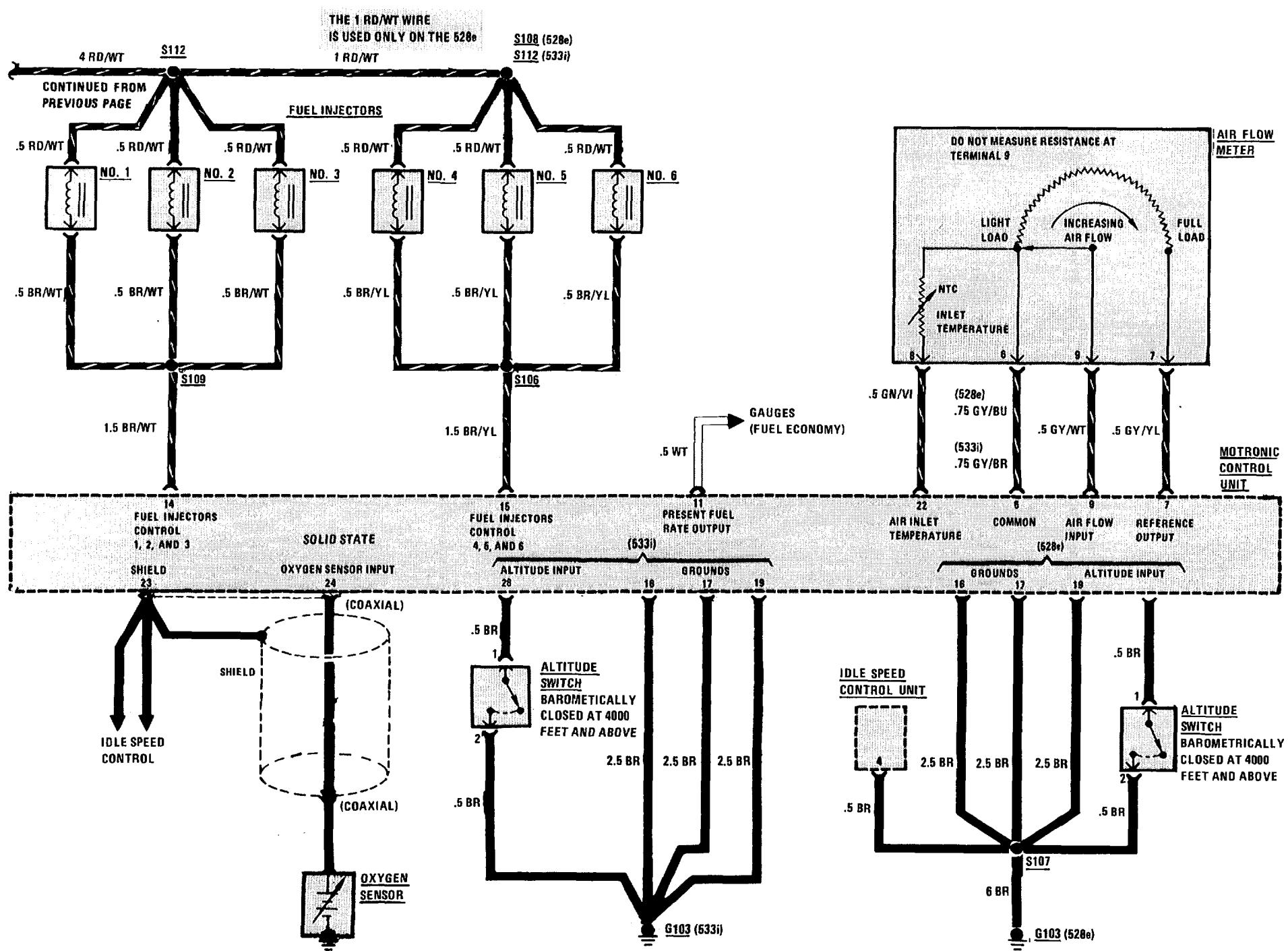


# 110 FUEL DELIVERY/EVAPORATIVE CONTROL

(For Component Locations See Page 204)

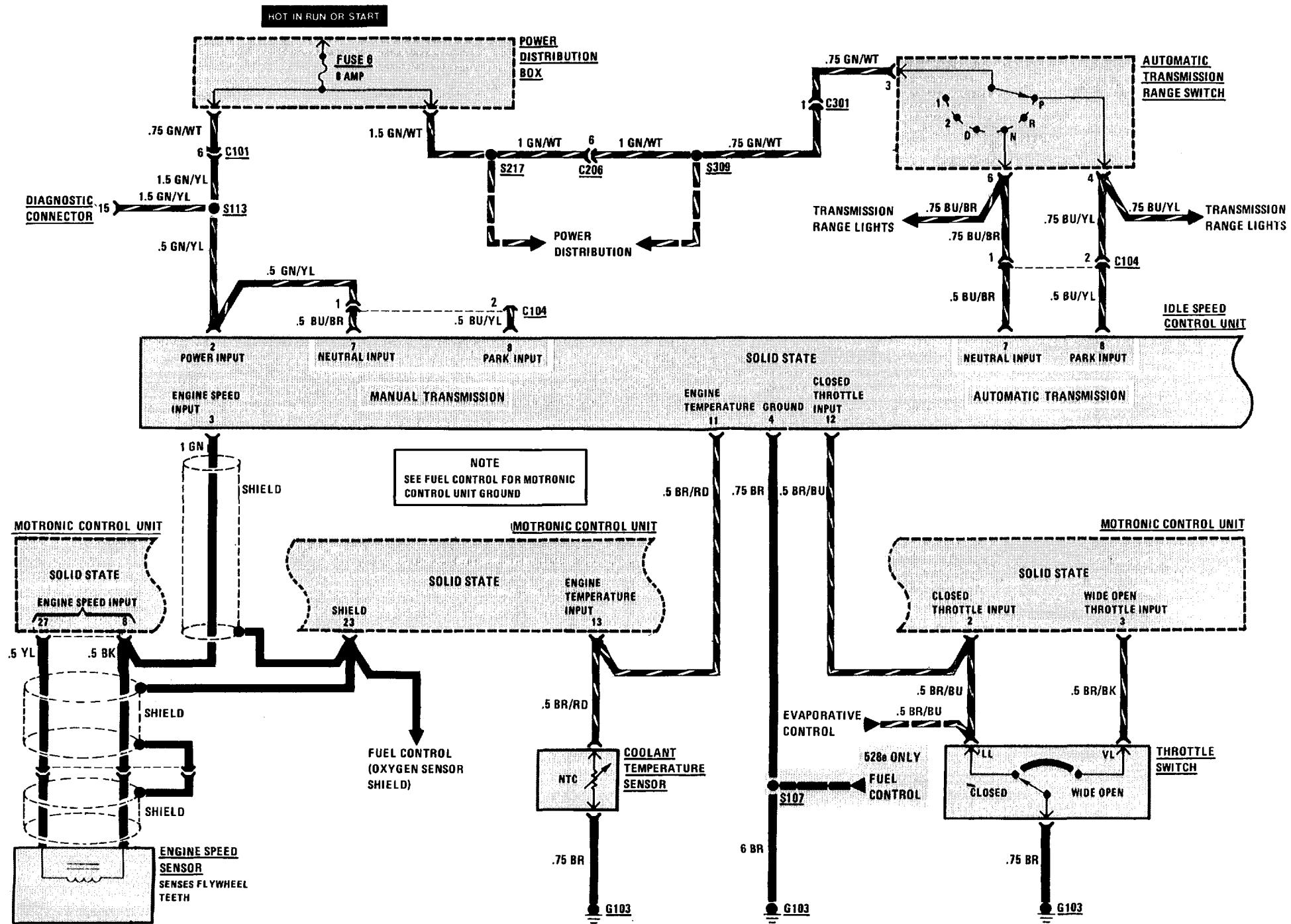


(For Component Locations See Page 204)

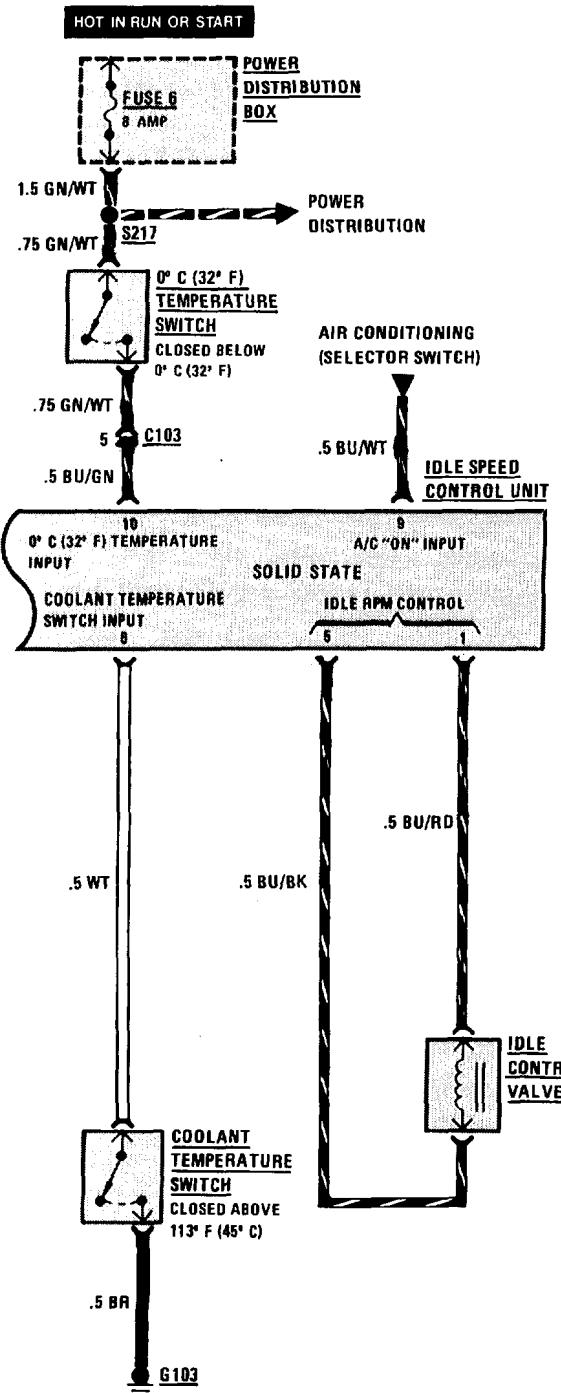


# 112 IDLE SPEED CONTROL

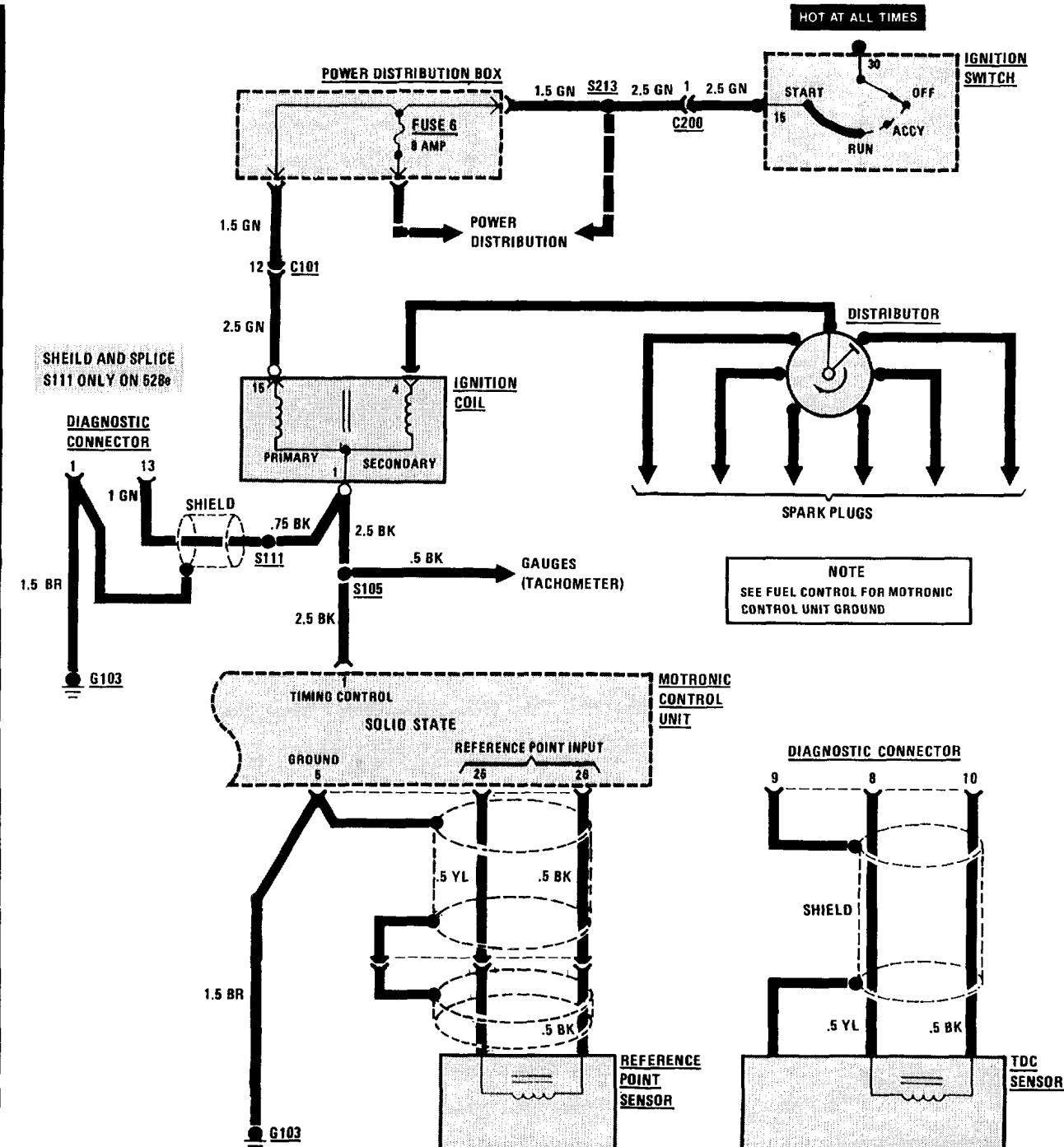
(For Component Locations See Page 206)



(For Component Locations See Page 206)

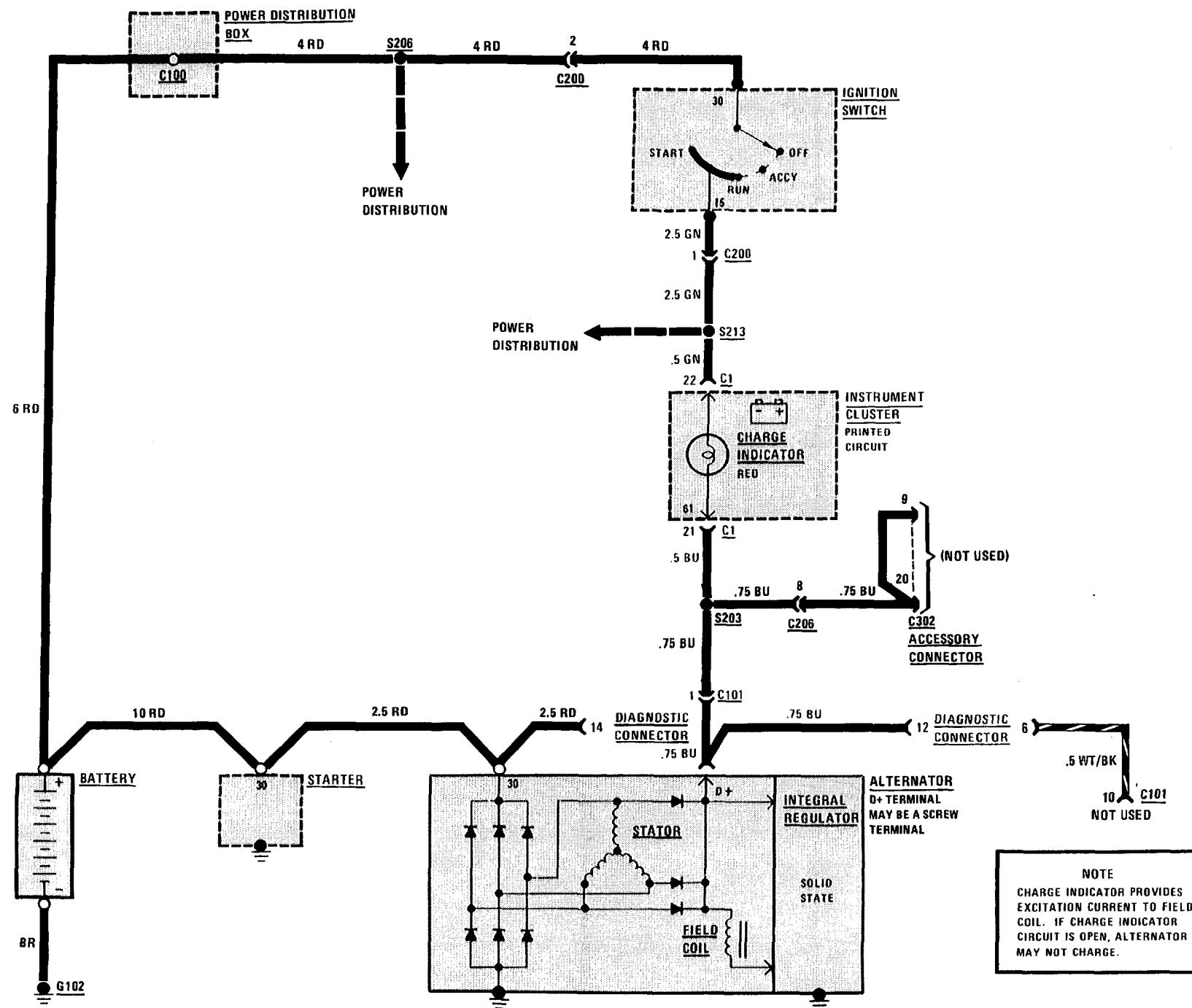


(For Component Locations See Page 207)

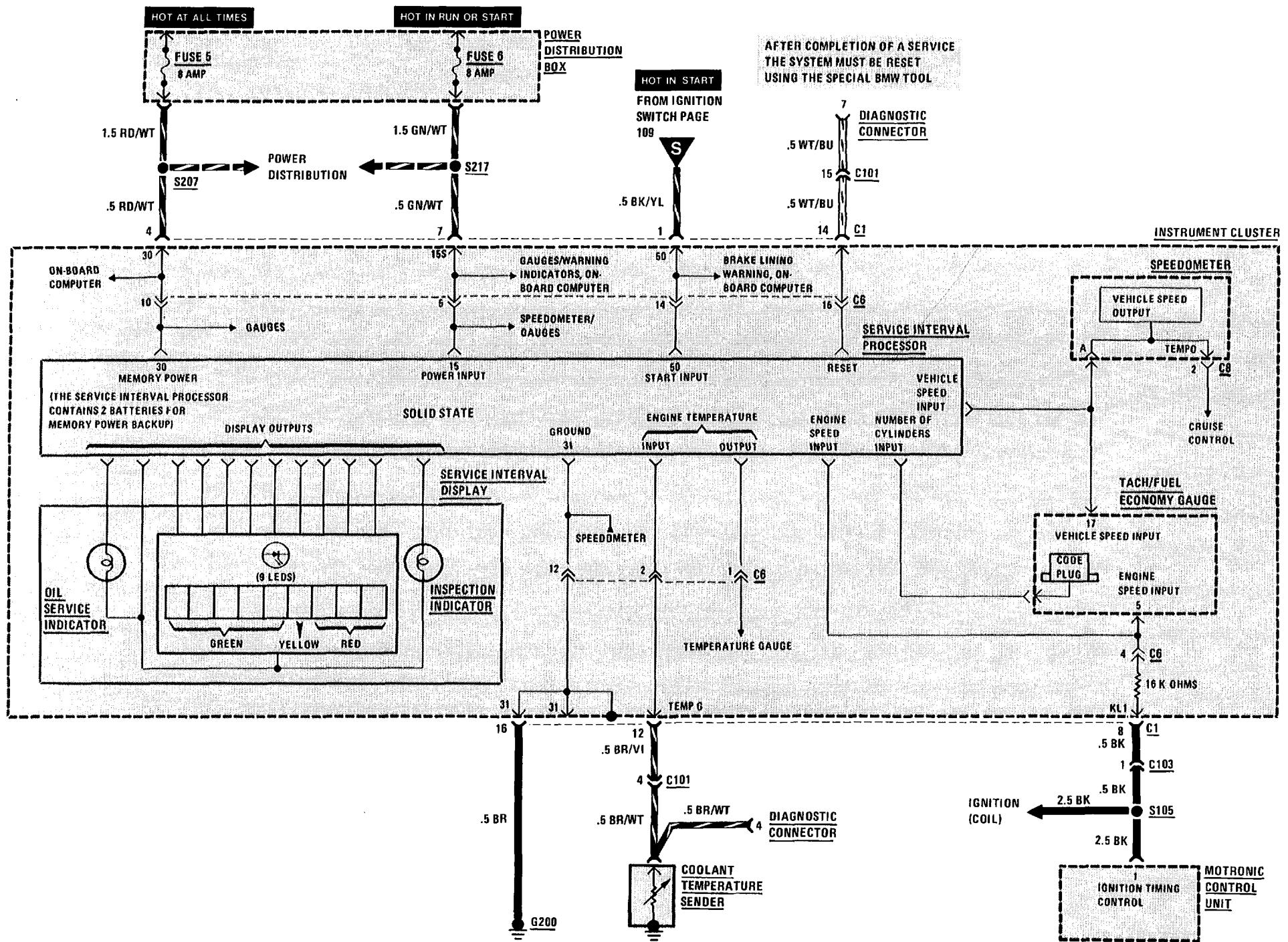


# 114 CHARGING SYSTEM

(For Component Locations See Page 203)

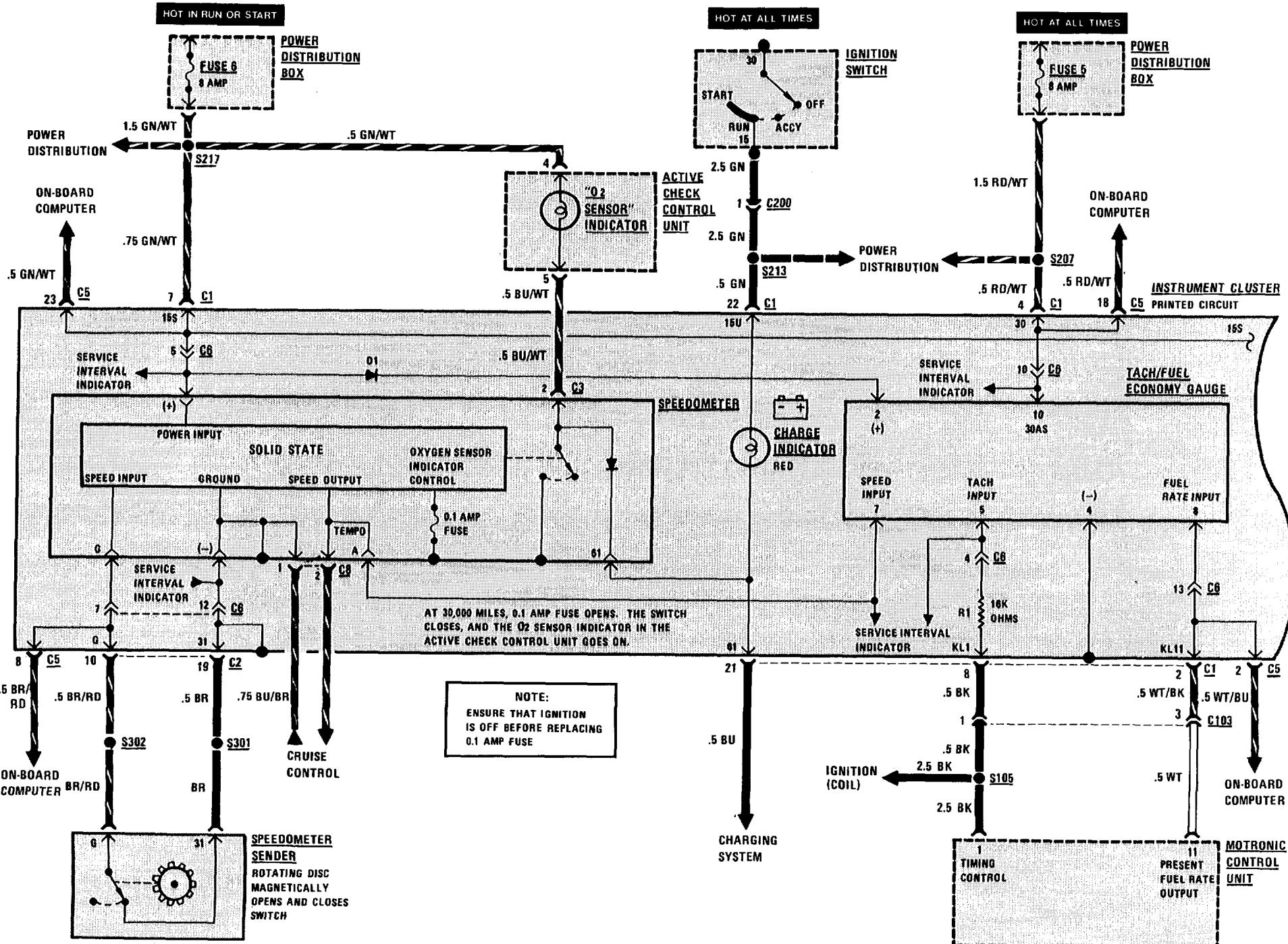


(For Component Locations See Page 211)

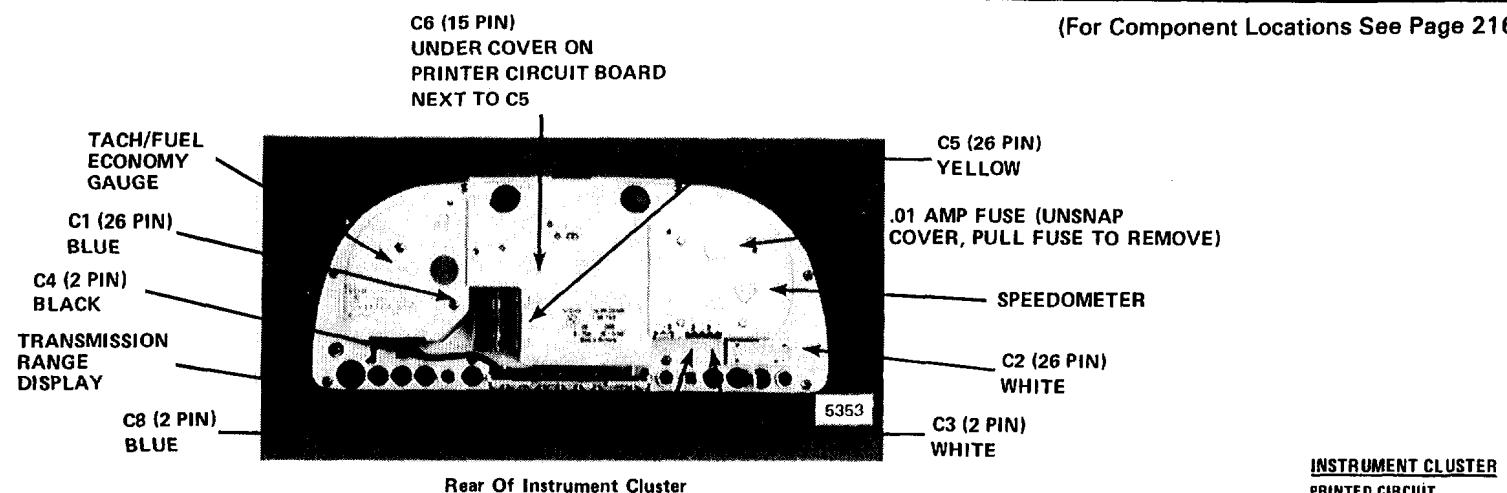


# 116 SPEEDOMETER/GAUGES/WARNING INDICATORS

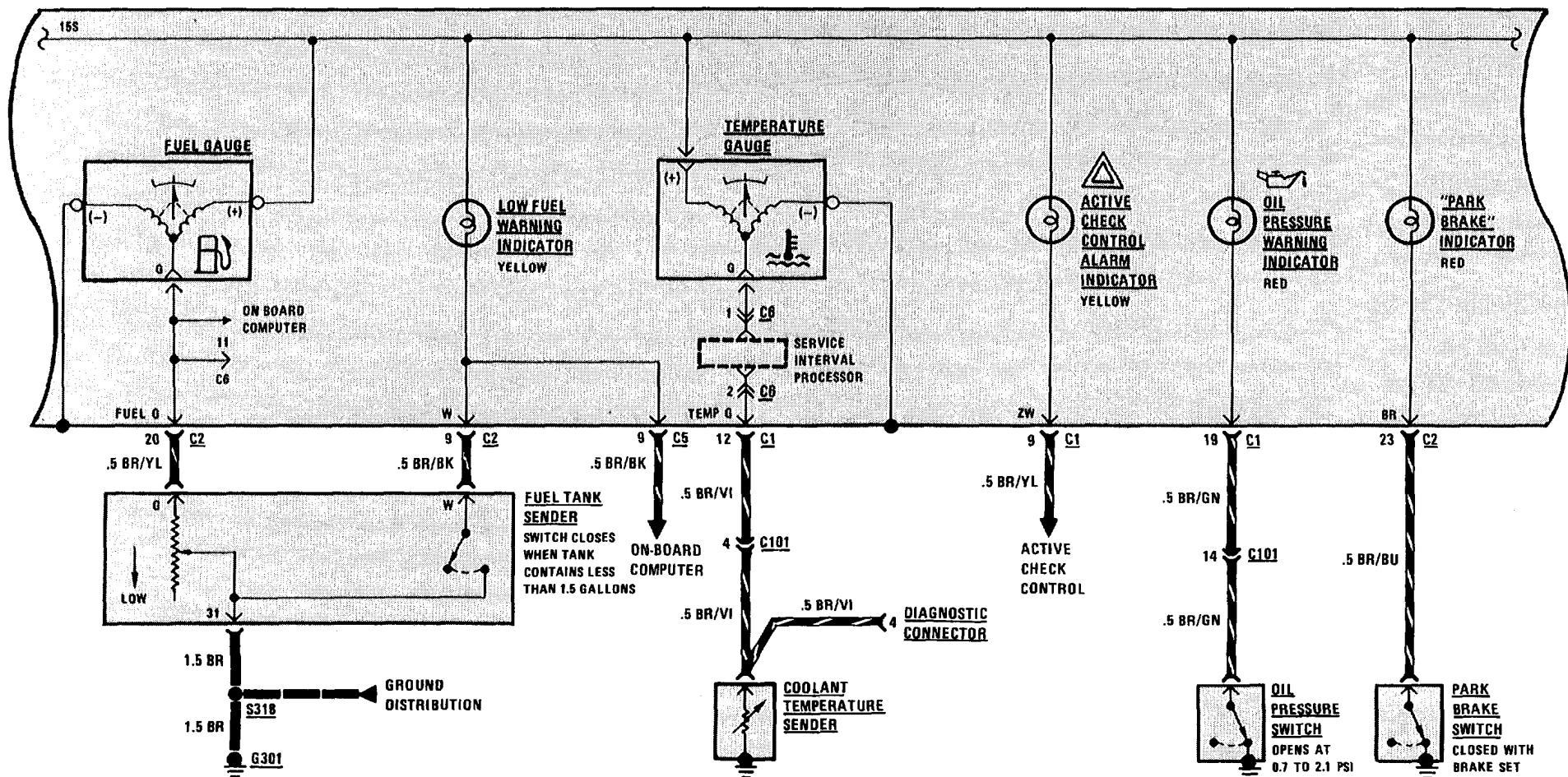
(For Component Locations See Page 216)



(For Component Locations See Page 216)

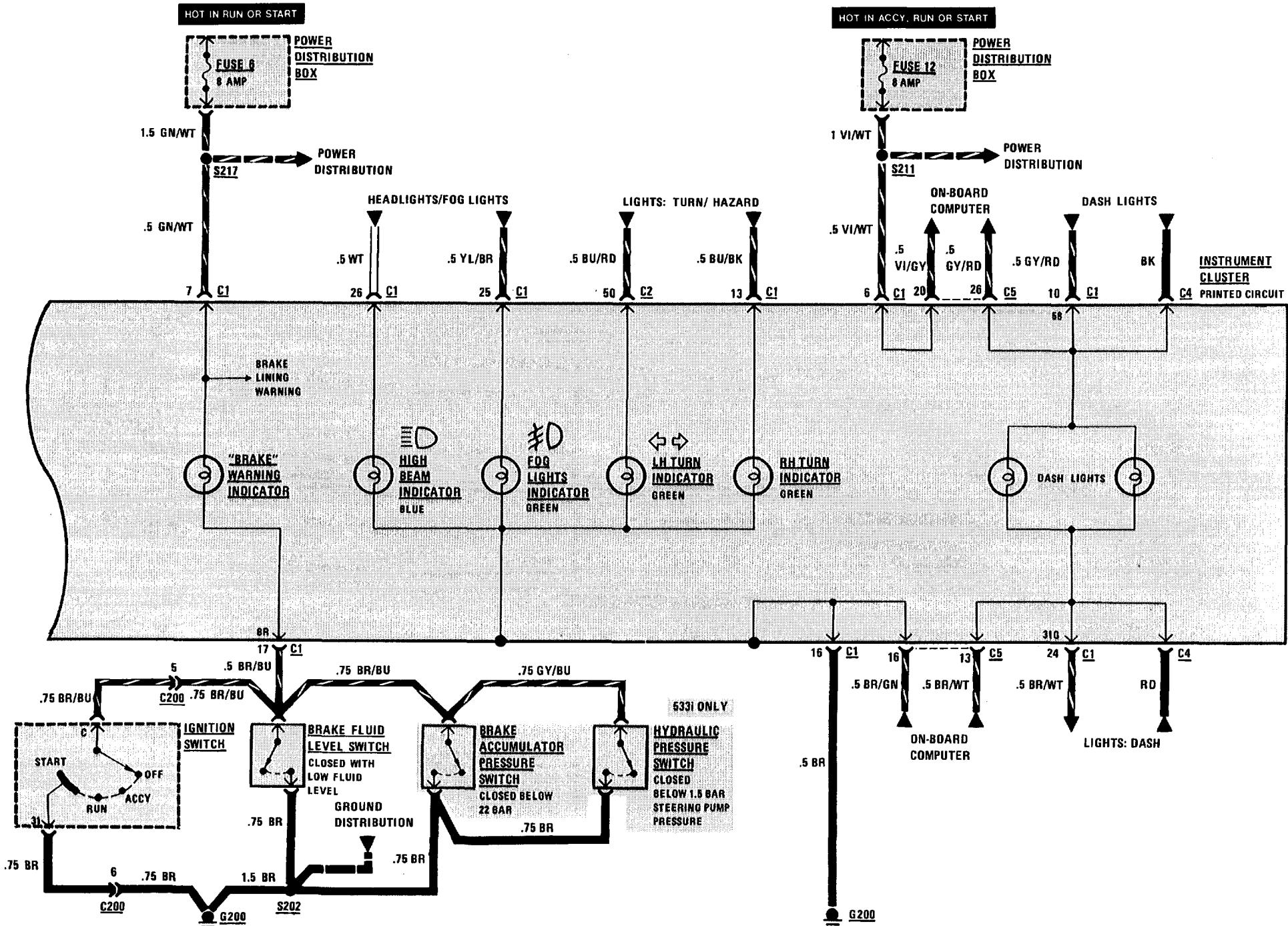


INSTRUMENT CLUSTER PRINTED CIRCUIT



# 118 WARNING INDICATORS

(For Component Locations See Page 216)



(For Component Locations See Page 201)

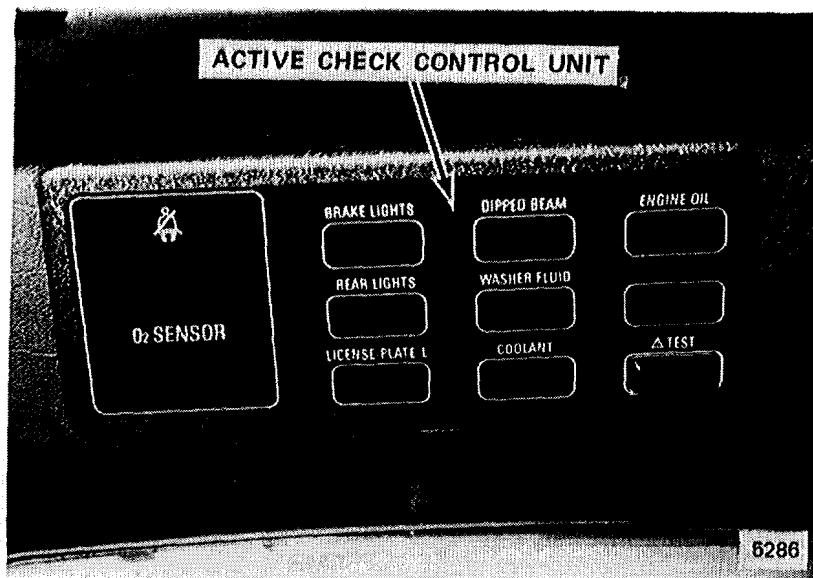
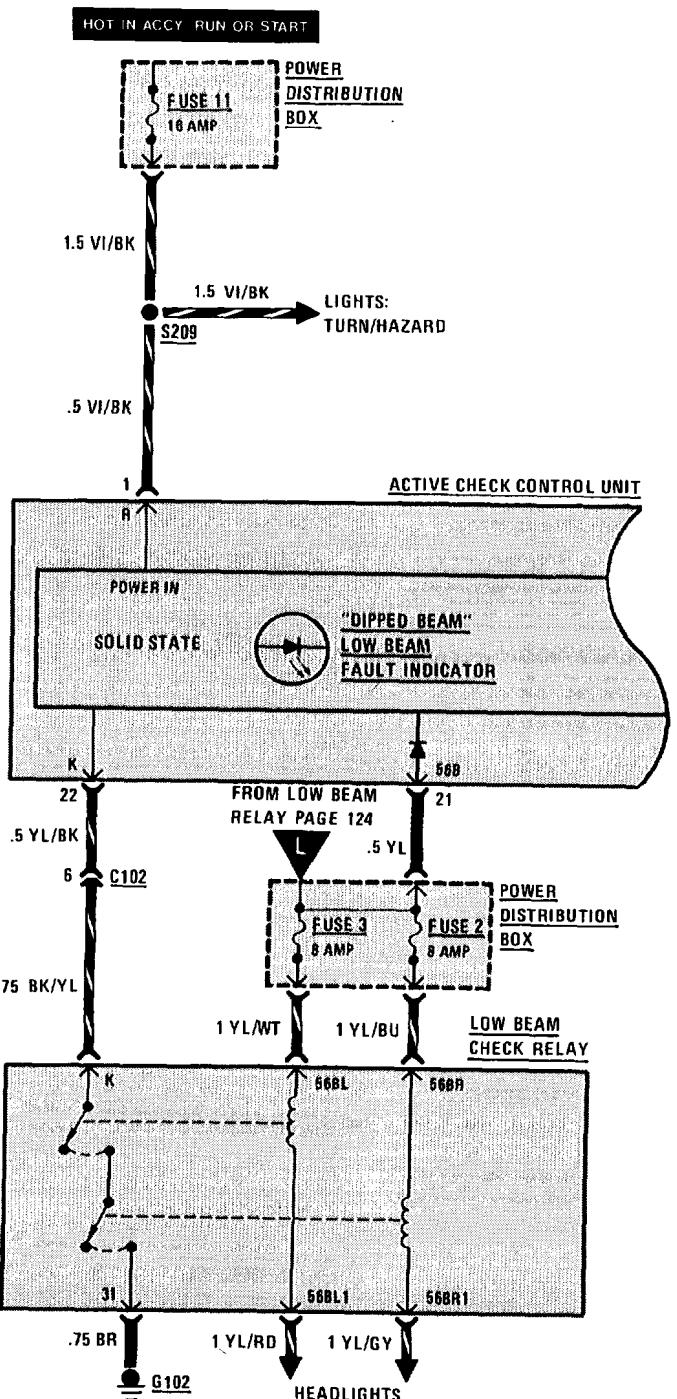


Figure 1 - Above Rear View Mirror

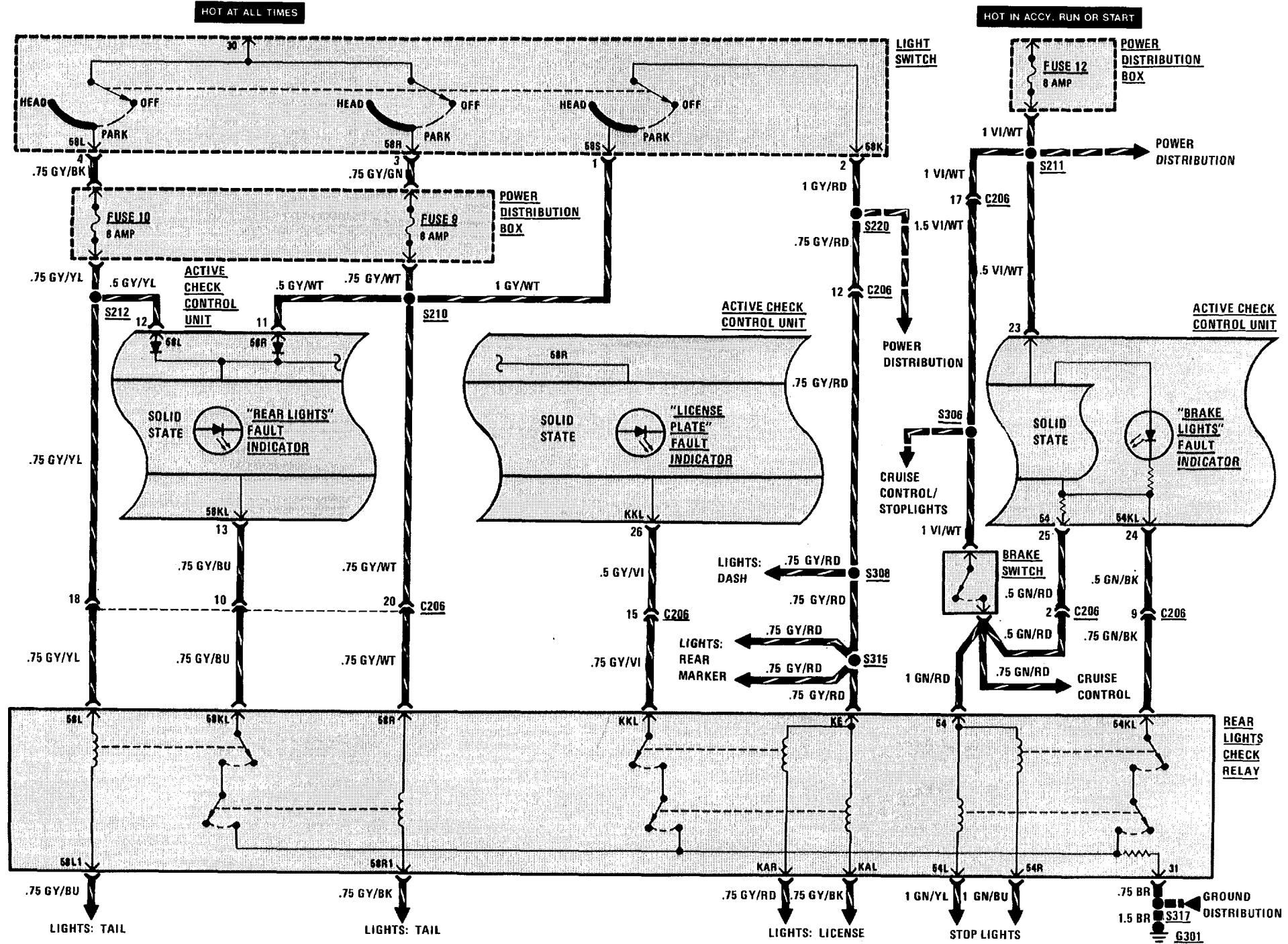
## ACTIVE CHECK CONTROL

- When the Ignition Switch is initially placed in "Run," the Active Check Control Alarm Indicator flashes, and the Active Check Control Unit Brake Light LED and panel light illuminate for test purposes. Depressing the brake pedal clears the display.
- When the Ignition Switch is places in "Run," fault monitoring begins. To monitor the low beams, rear lights, or license lights, those circuits must be on. The brake lights are monitored only while the brake pedal is depressed.
- When a fault occurs, the alarm indicator flashes, the appropriate LED indicator lights, and the panel light goes on for five seconds. Depressing the test button will clear the alarm indicator, but the LED fault indicator remains on.
- To test the unit, depress the test button. The LED fault indicators and panel lights should go on.

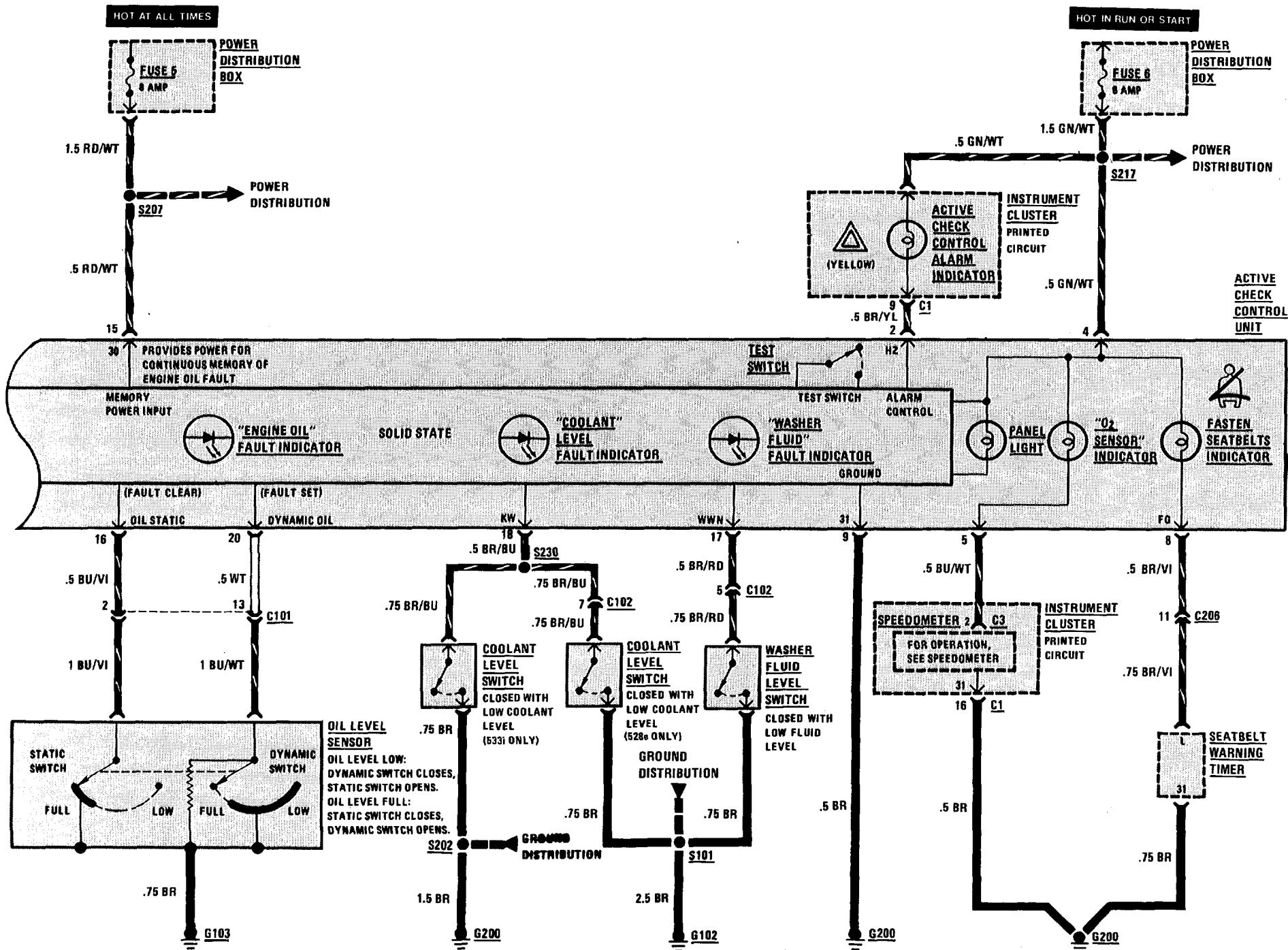


# 120 ACTIVE CHECK CONTROL

(For Component Locations See Page 201)

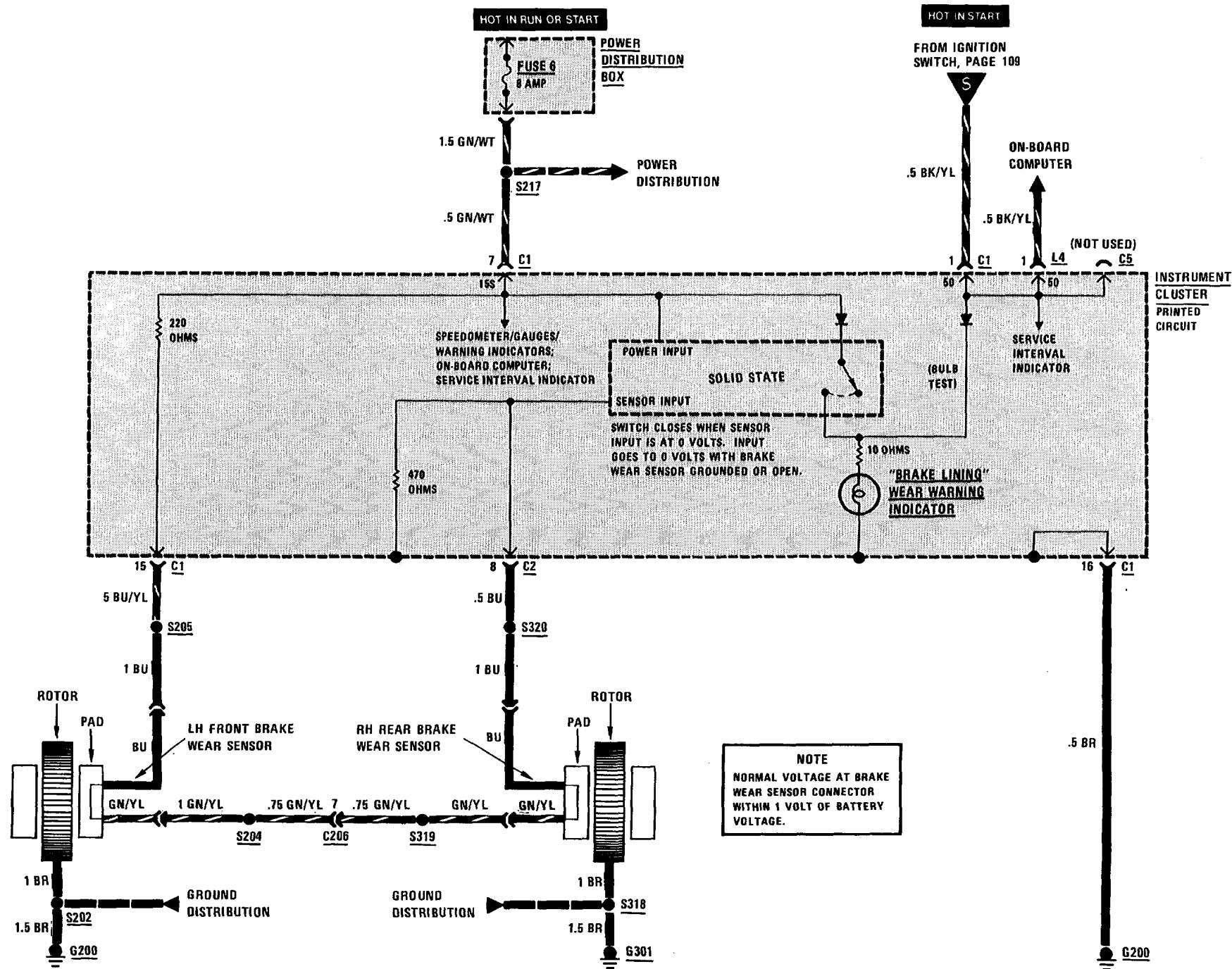


(For Component Locations See Page 201)



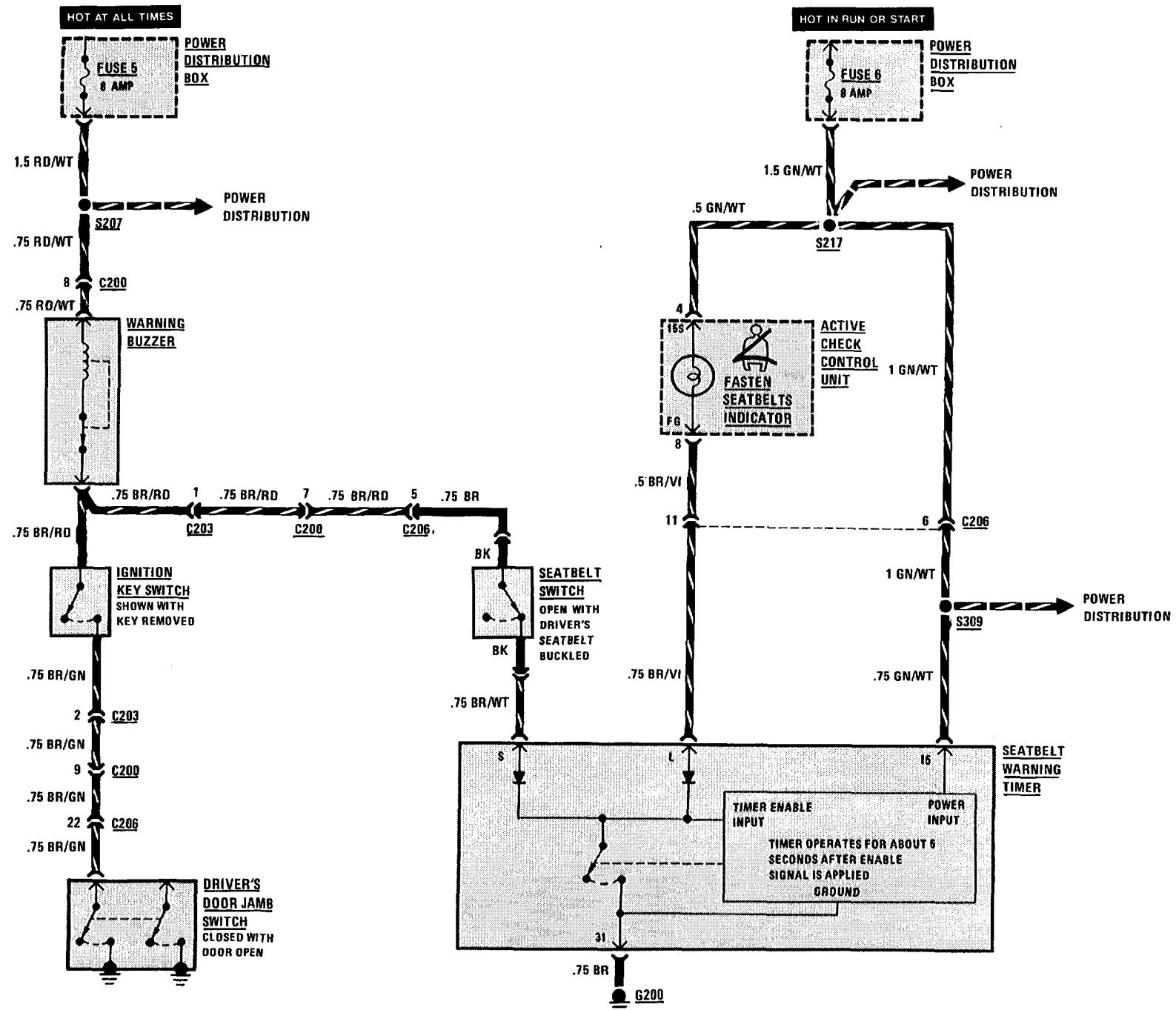
## 122 BRAKE LINING WARNING

(For Component Locations See Page 202)



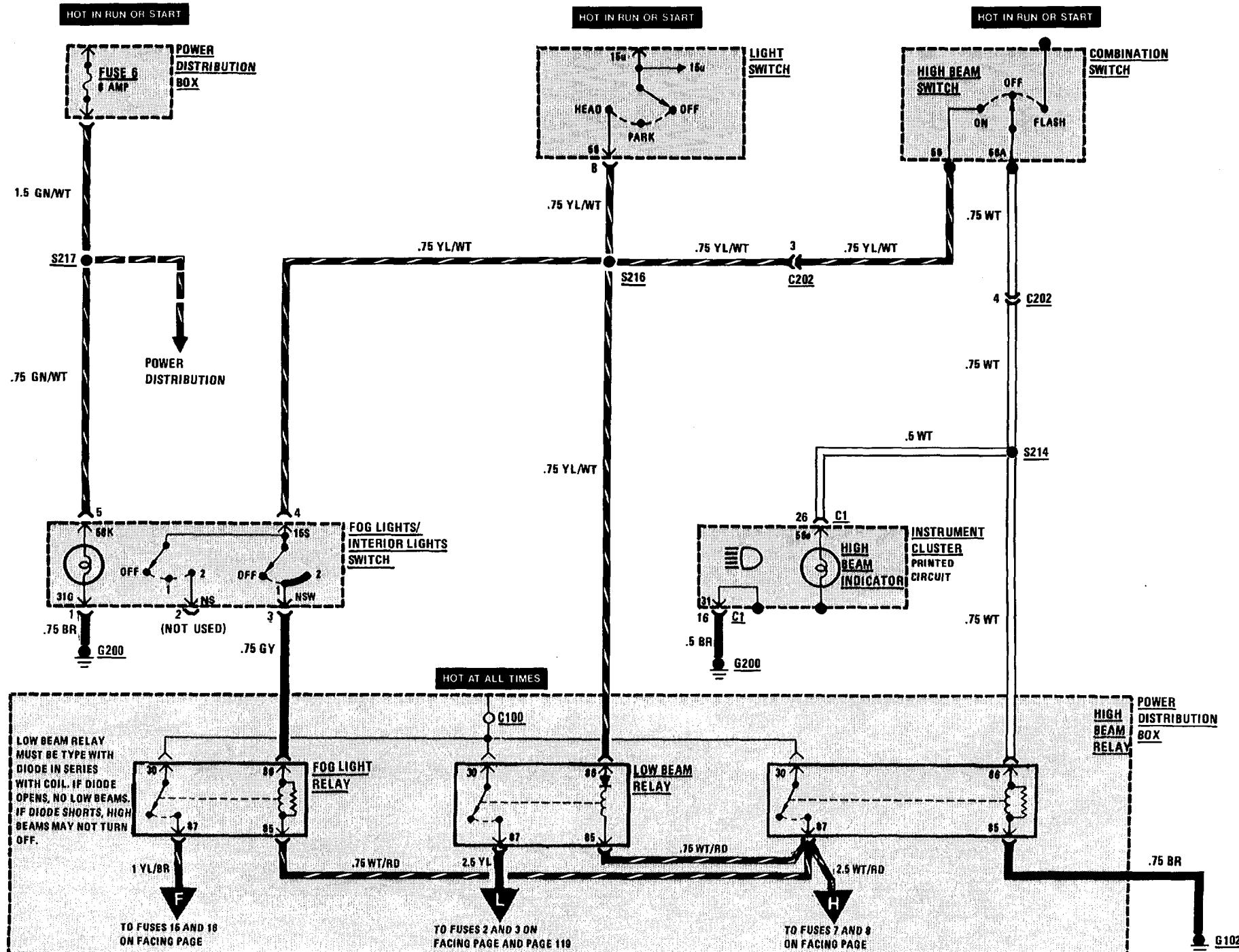
# IGNITION KEY WARNING/SEATBELT WARNING 123

(For Component Locations See Page 207)

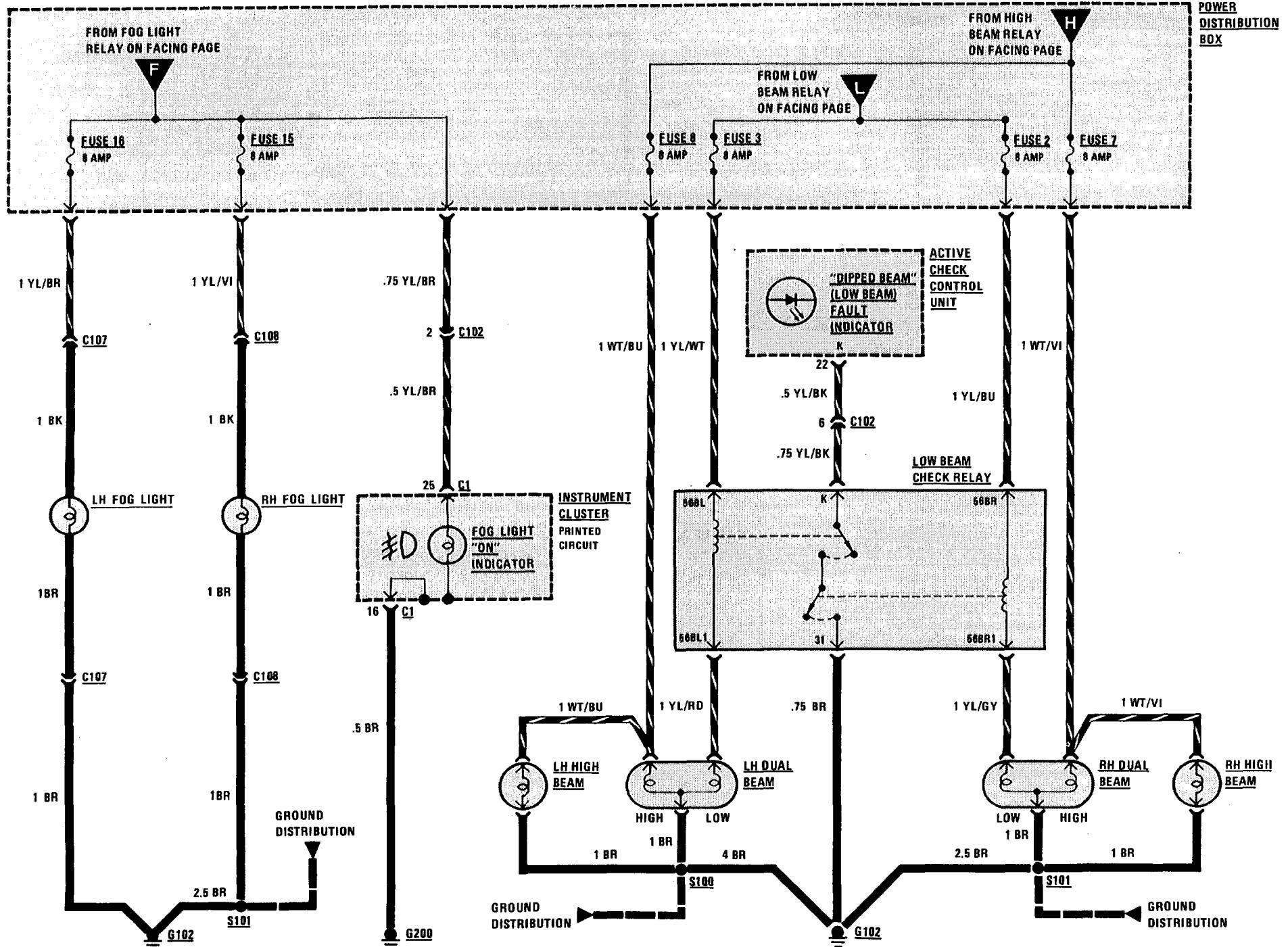


## 124 HEADLIGHTS (CONTROL)/FOG LIGHTS (CONTROL)

(For Component Locations See Page 205)

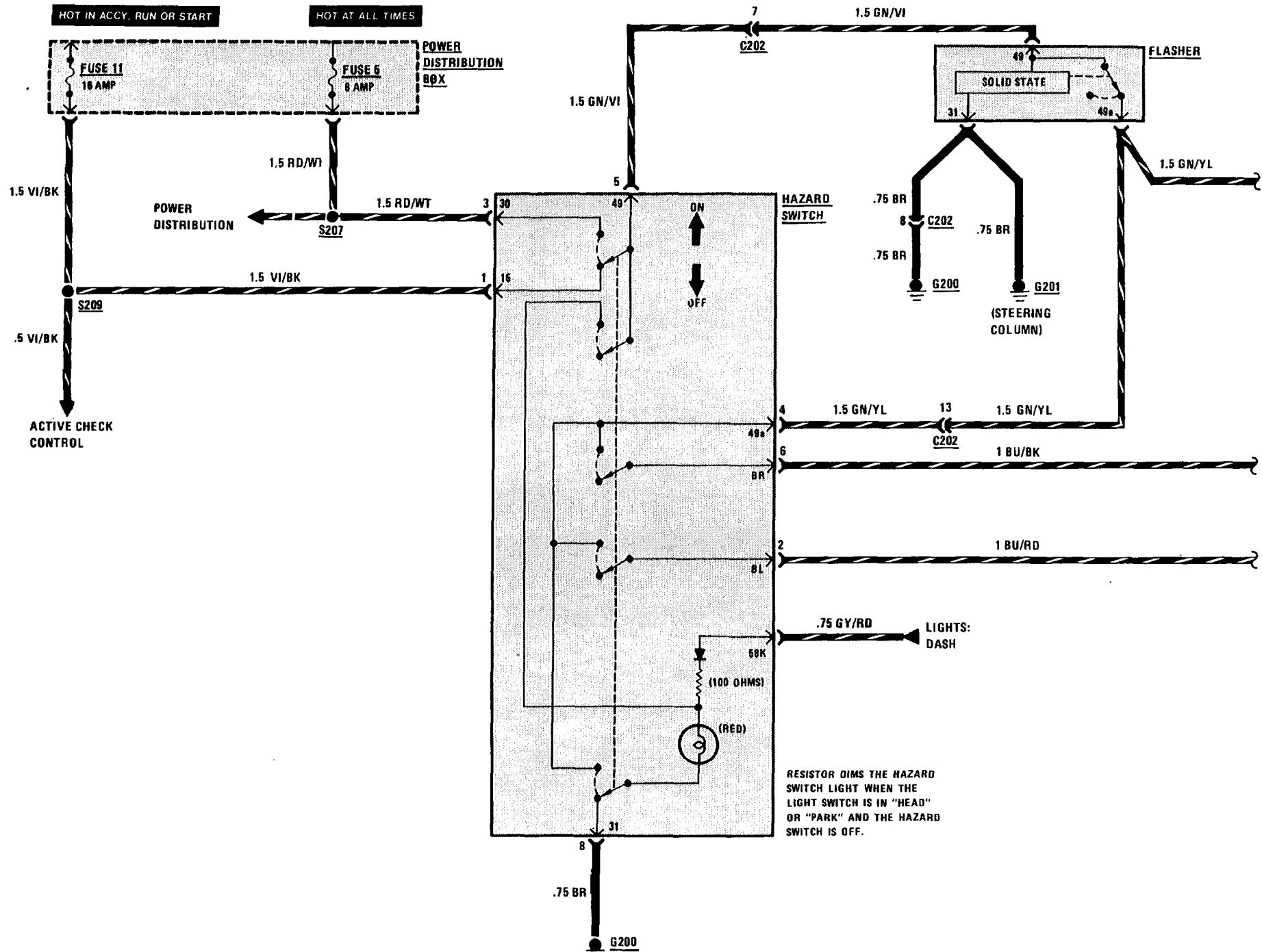


(For Component Locations See Page 205)

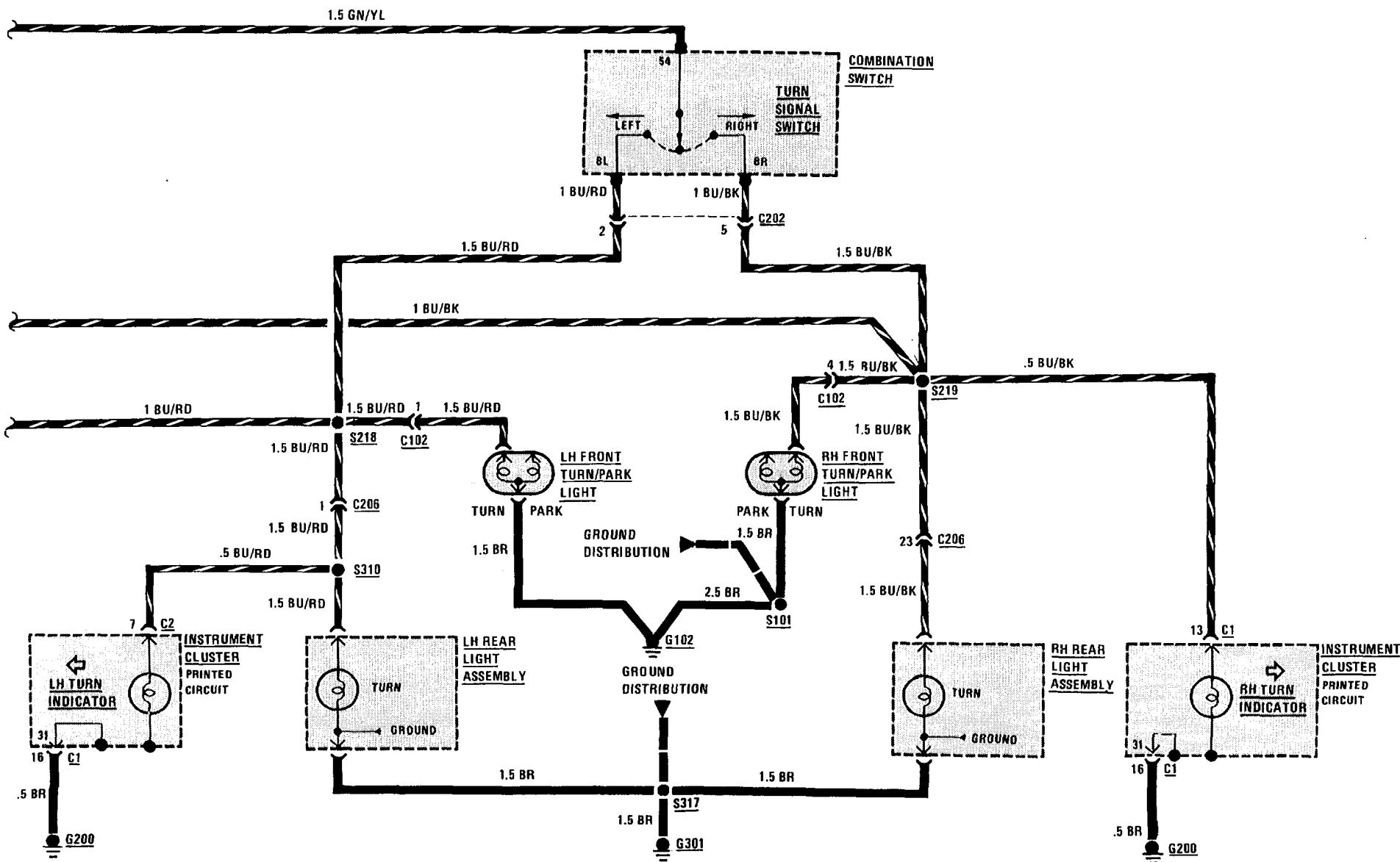


## 126 LIGHTS: TURN/HAZARD WARNING

(For Component Locations See Page 209)

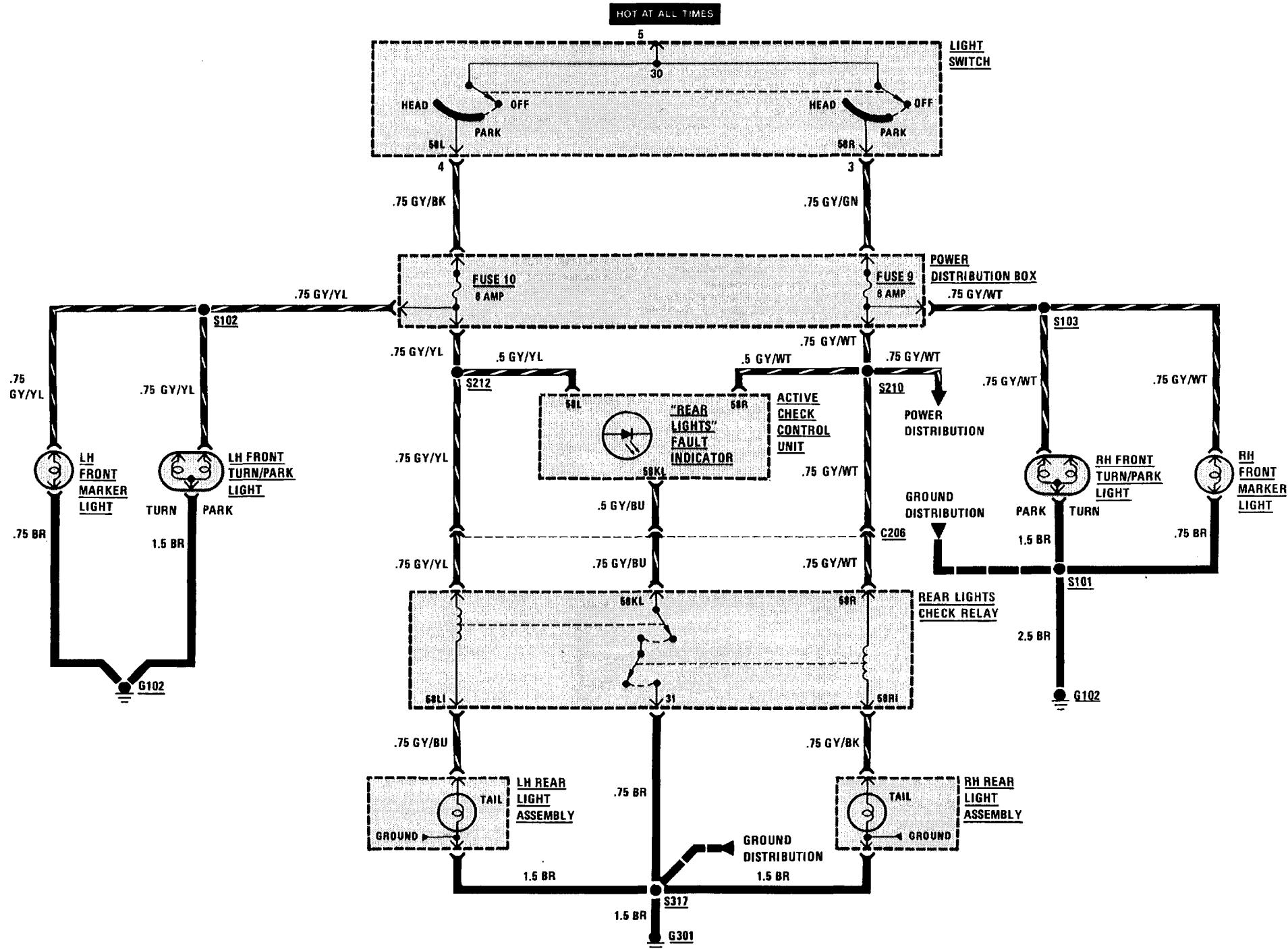


(For Component Locations See Page 209)

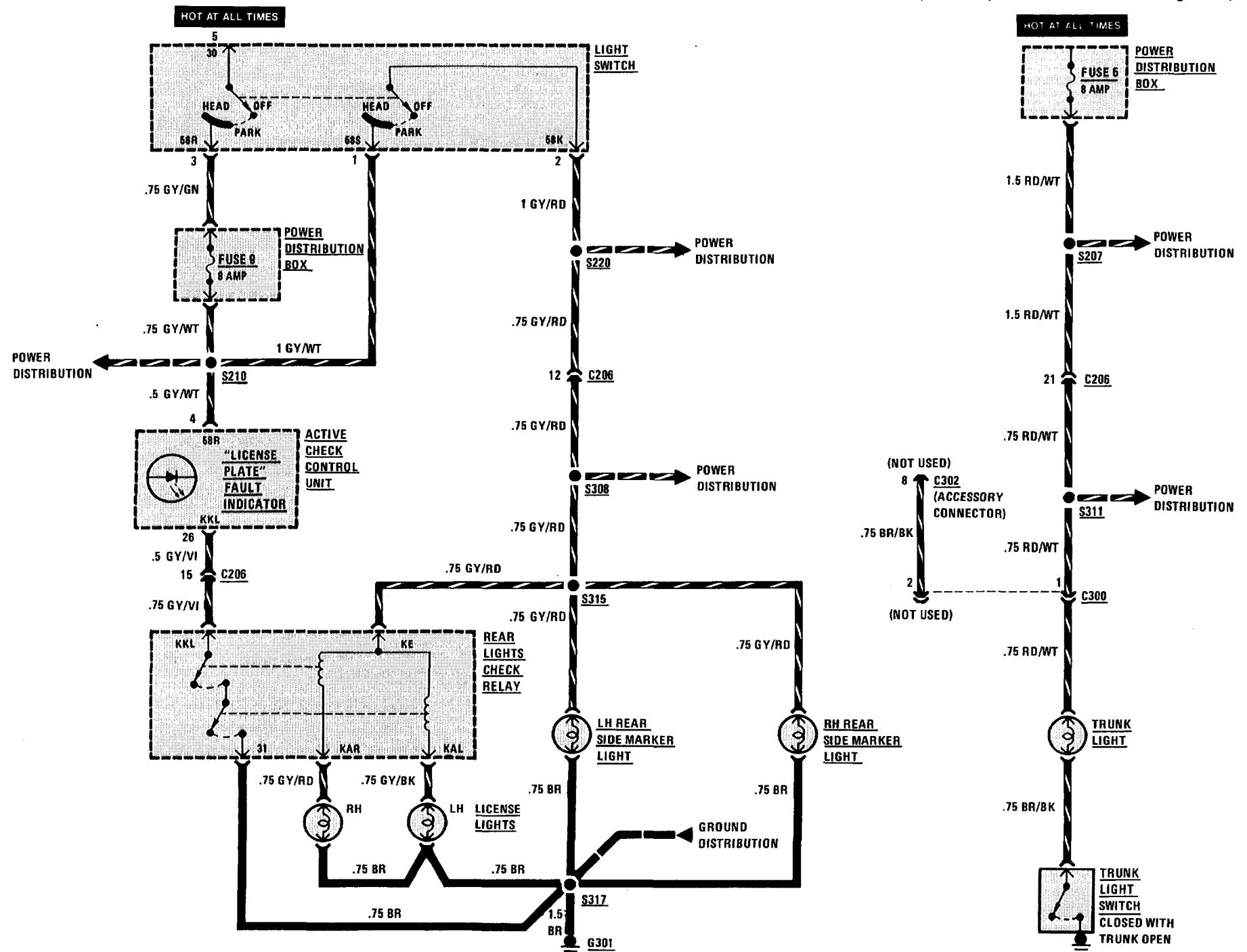


## 128 LIGHTS: FRONT PARK/FRONT MARKER/TAIL

(For Component Locations See Page 208)

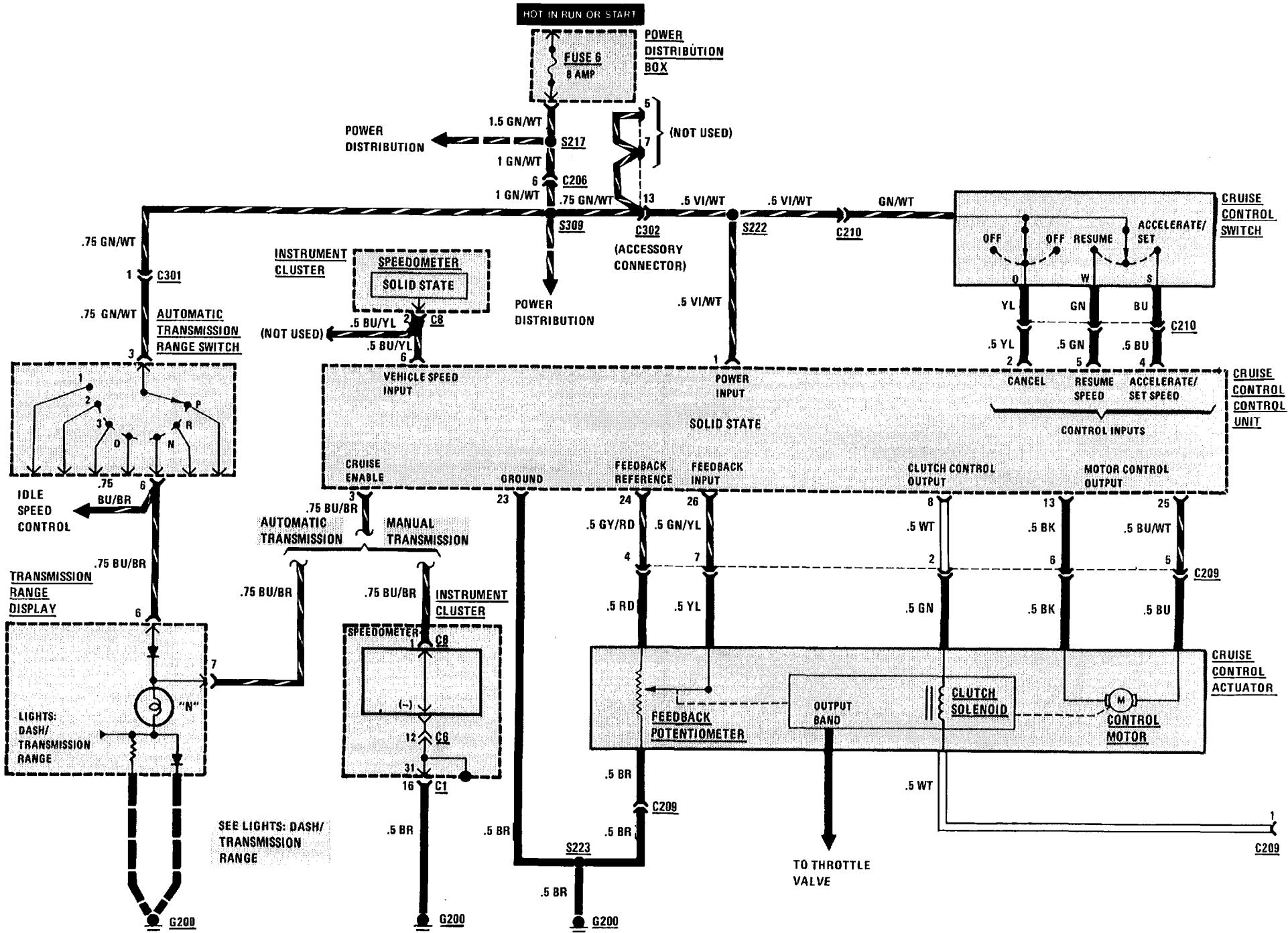


(For Component Locations See Page 208)

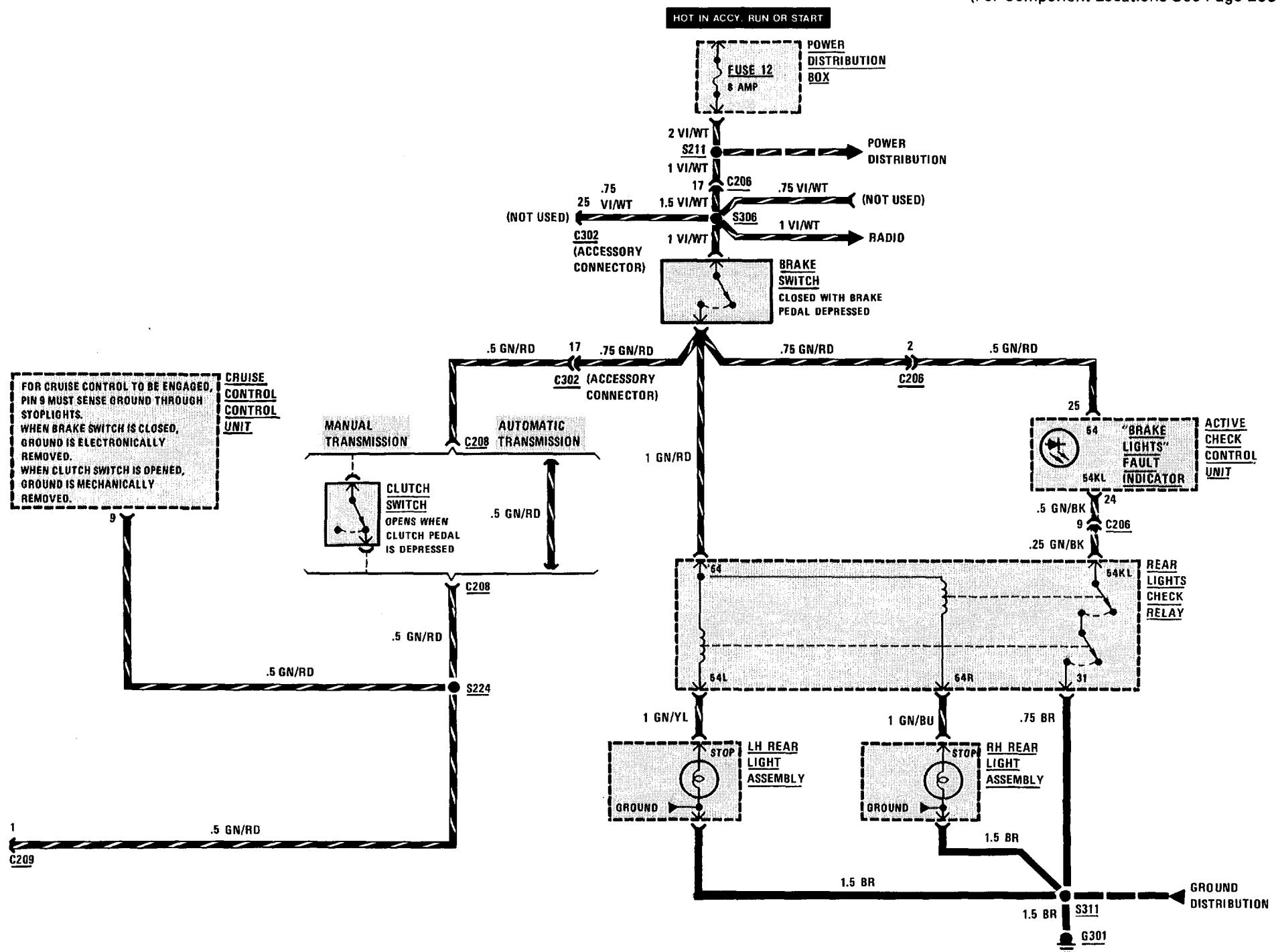


# 130 CRUISE CONTROL/STOPLIGHTS

(For Component Locations See Page 203)

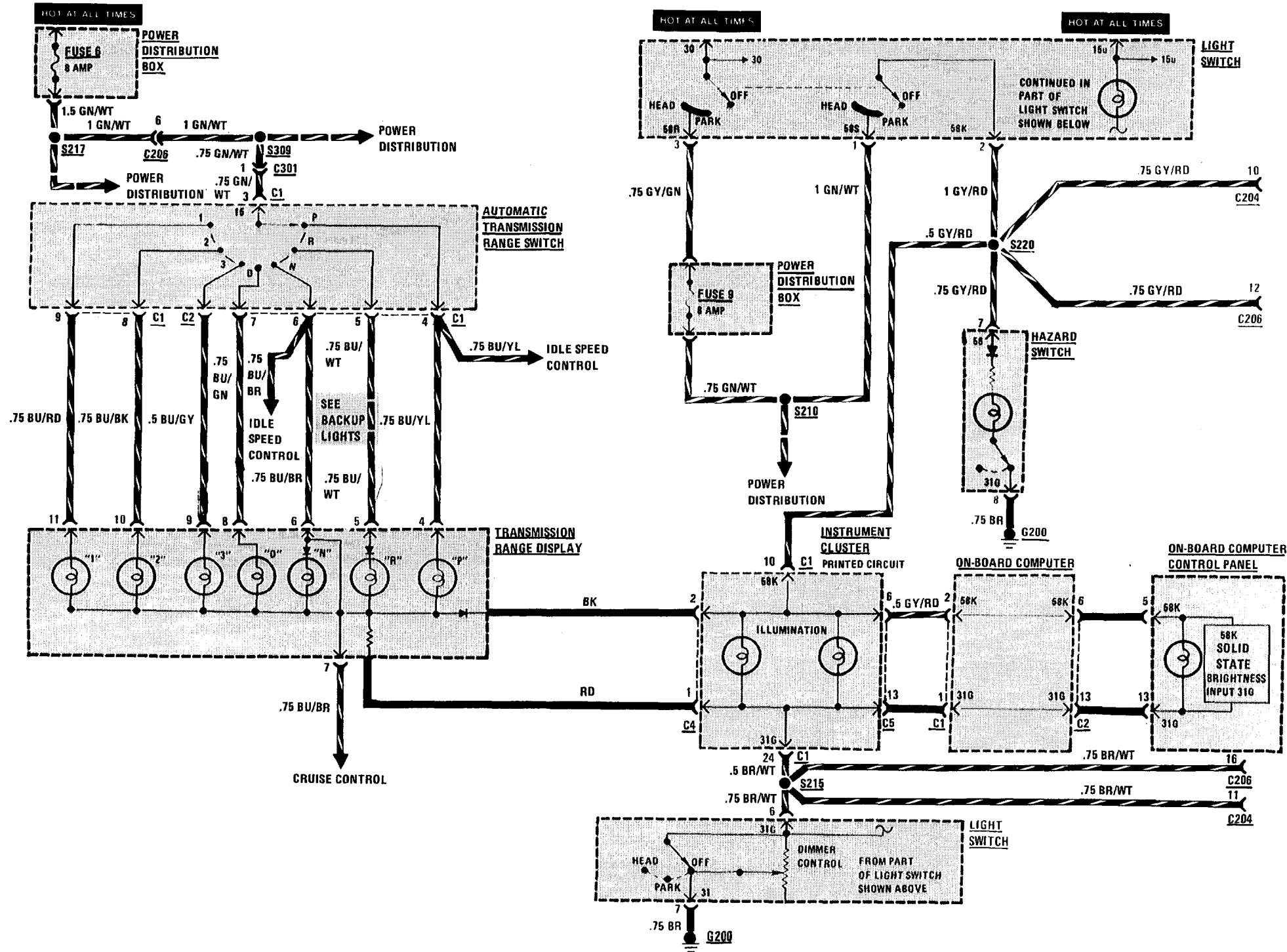


(For Component Locations See Page 203)



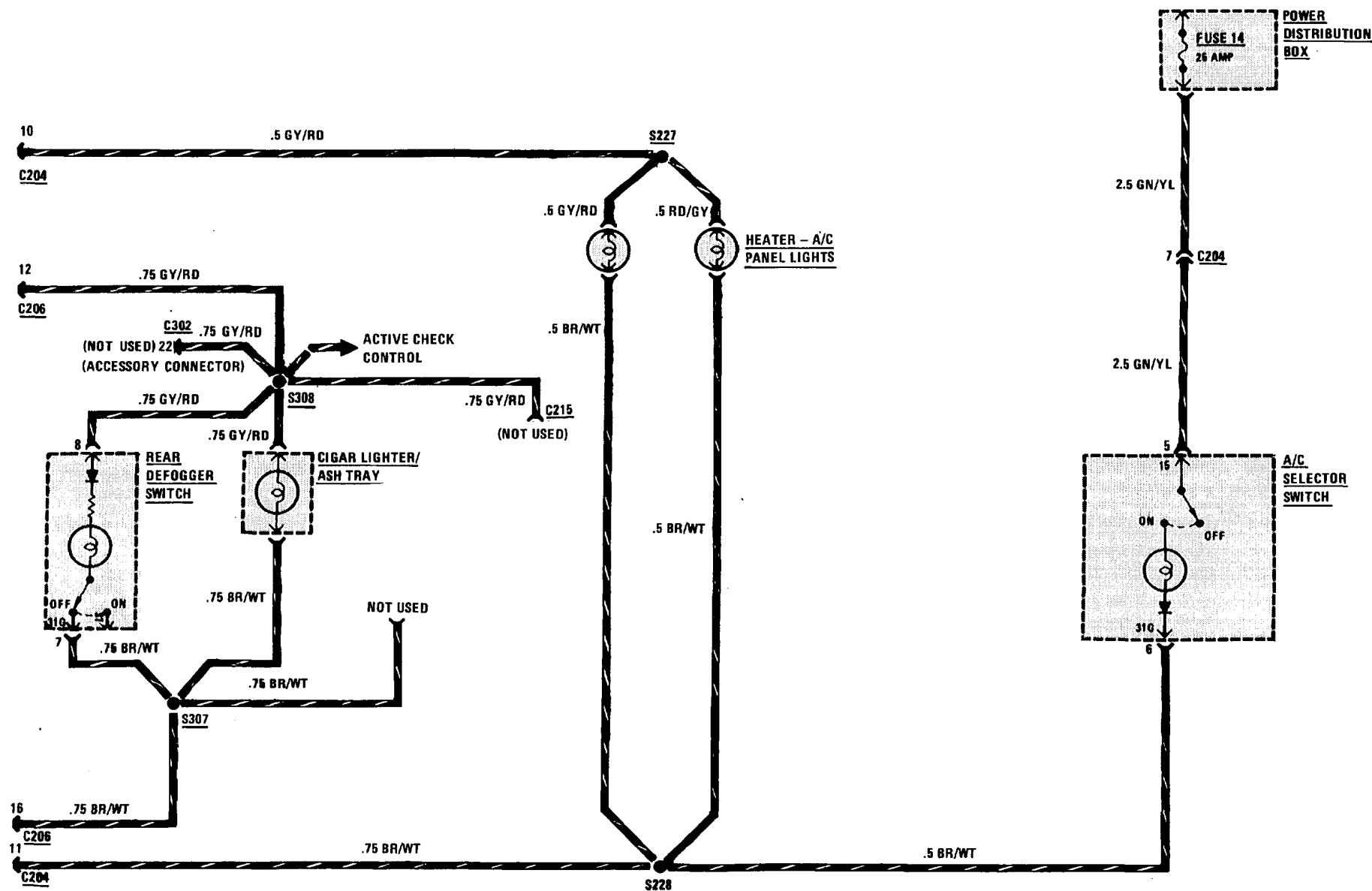
# 132 LIGHTS: DASH/TRANSMISSION RANGE

(For Component Locations See Page 208)



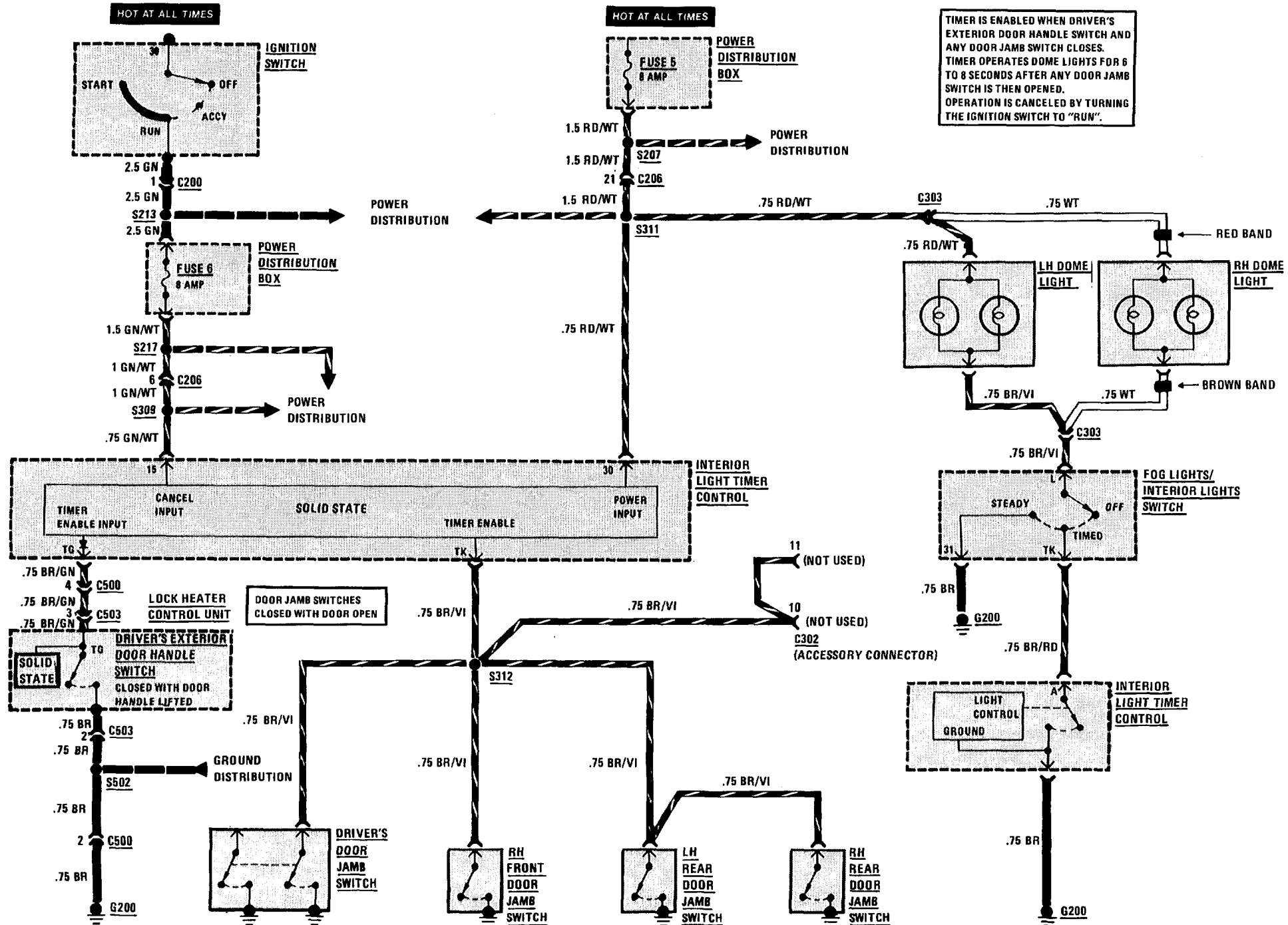
(For Component Locations See Page 208)

HOT IN RUN ONLY FROM UNLOADER RELAY

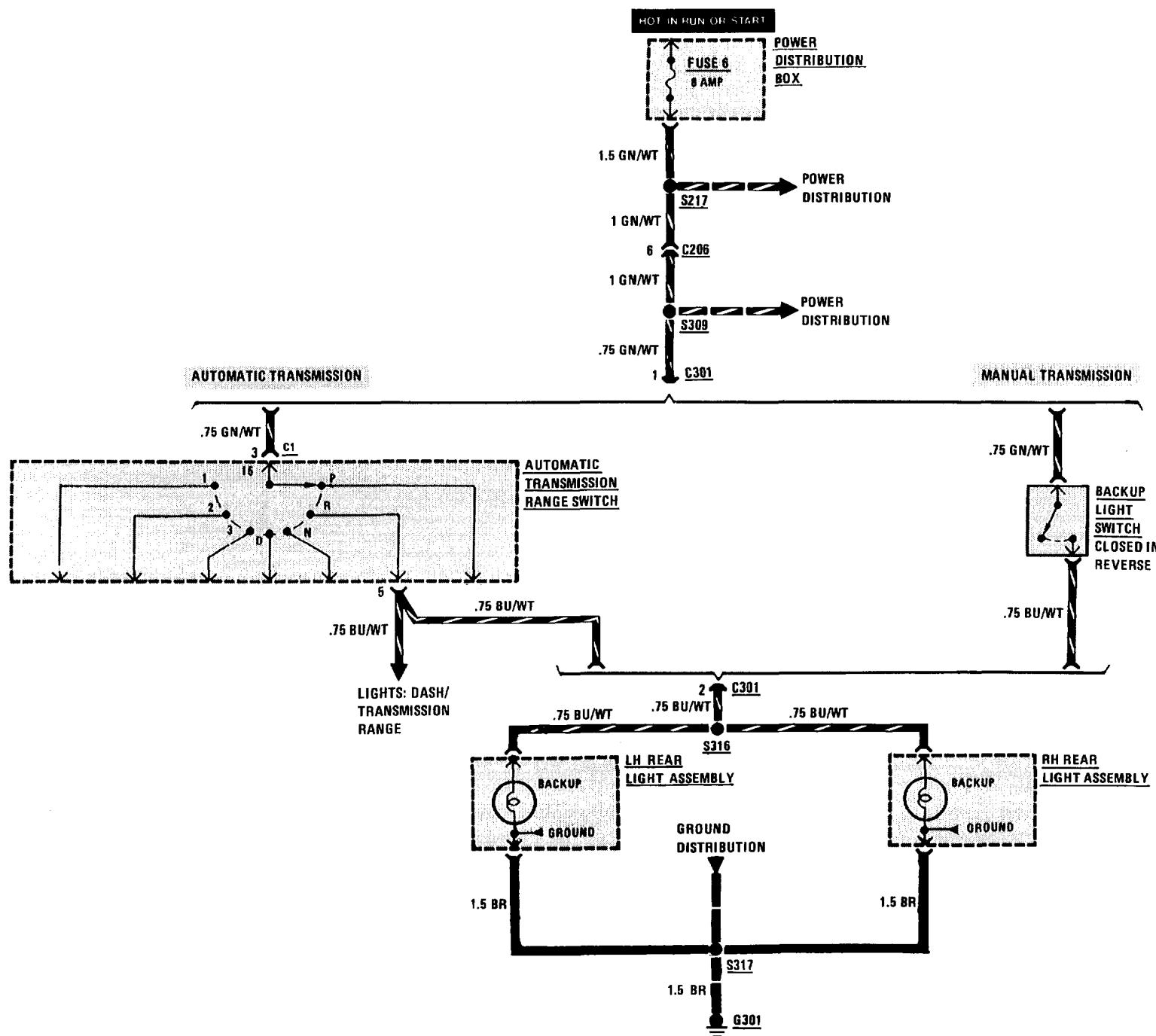


# 134 INTERIOR LIGHTS

(For Component Locations See Page 207)

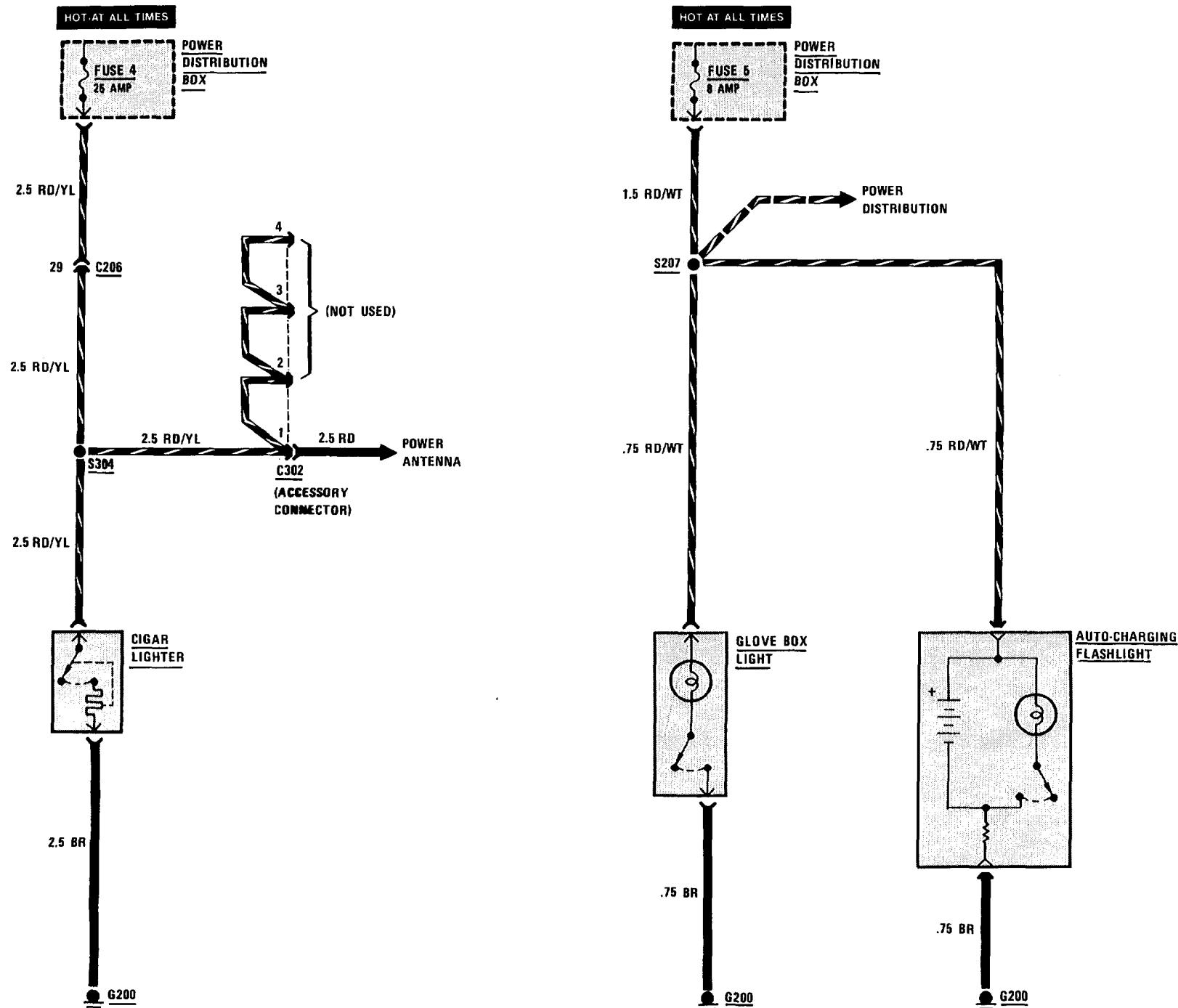


(For Component Locations See Page 202)

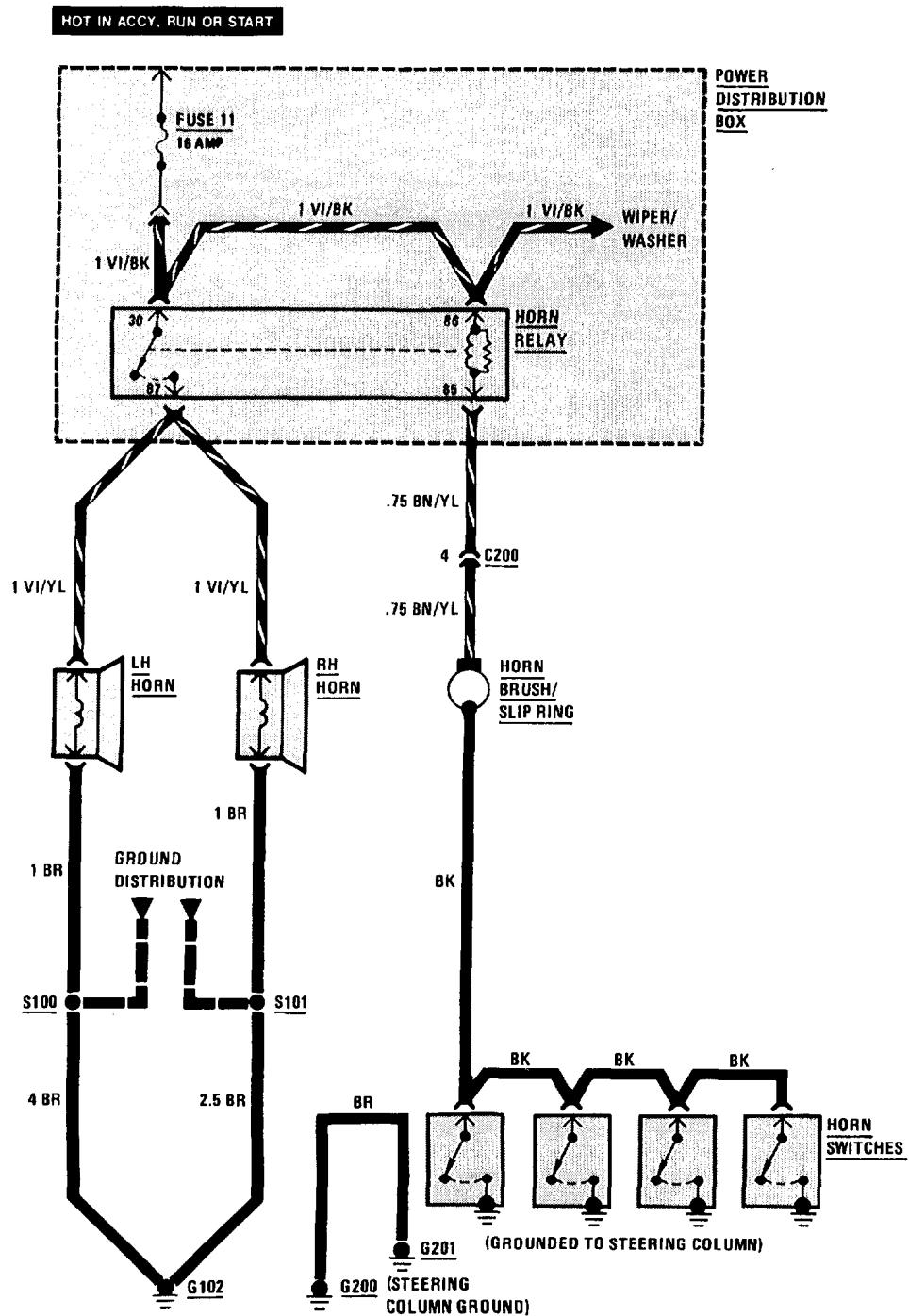


# 136 CIGAR LIGHTER/GLOVE BOX LIGHT/AUTO-CHARGING FLASHLIGHT

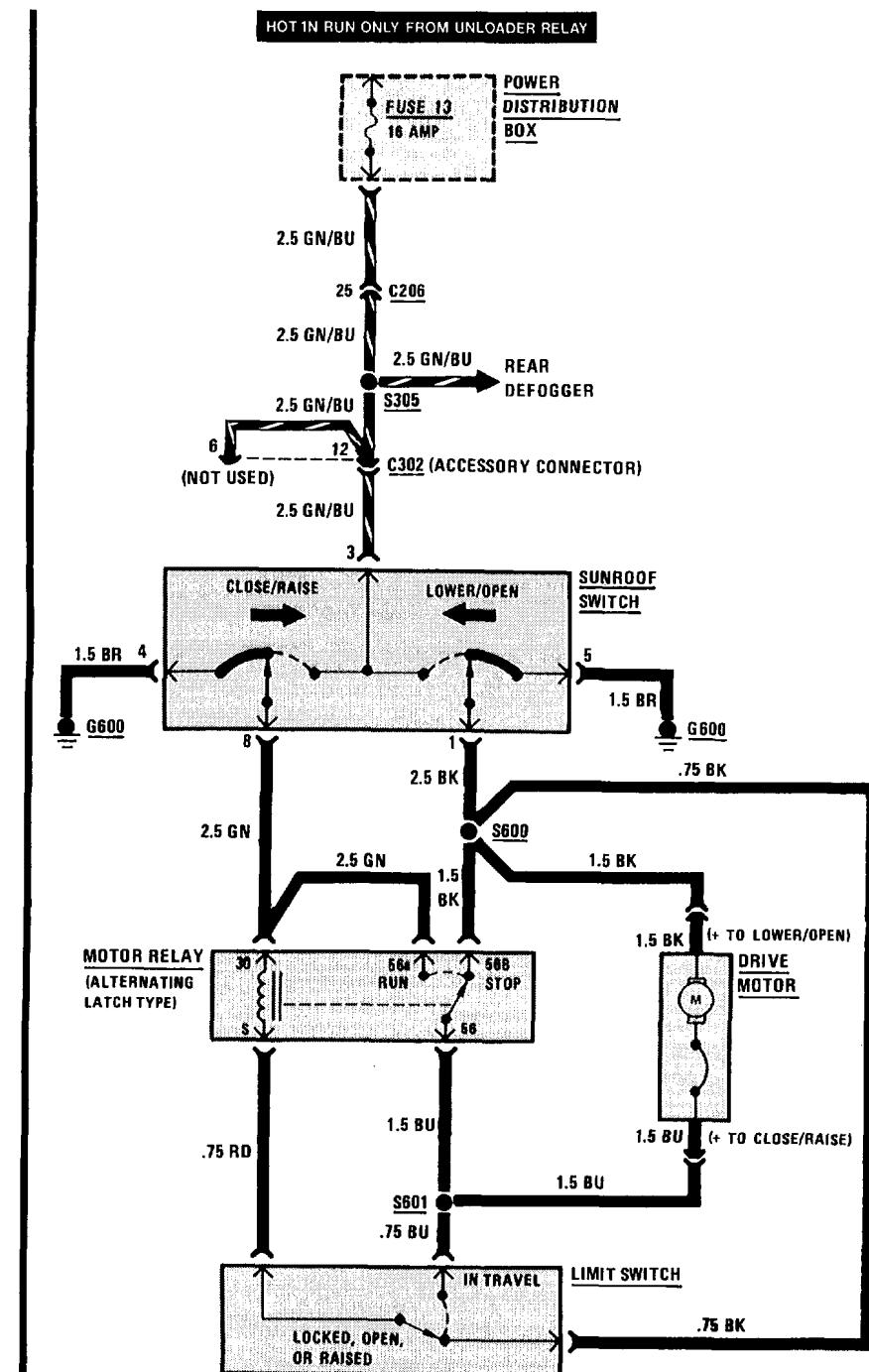
(For Component Locations See Page 203)



(For Component Locations See Page 206)

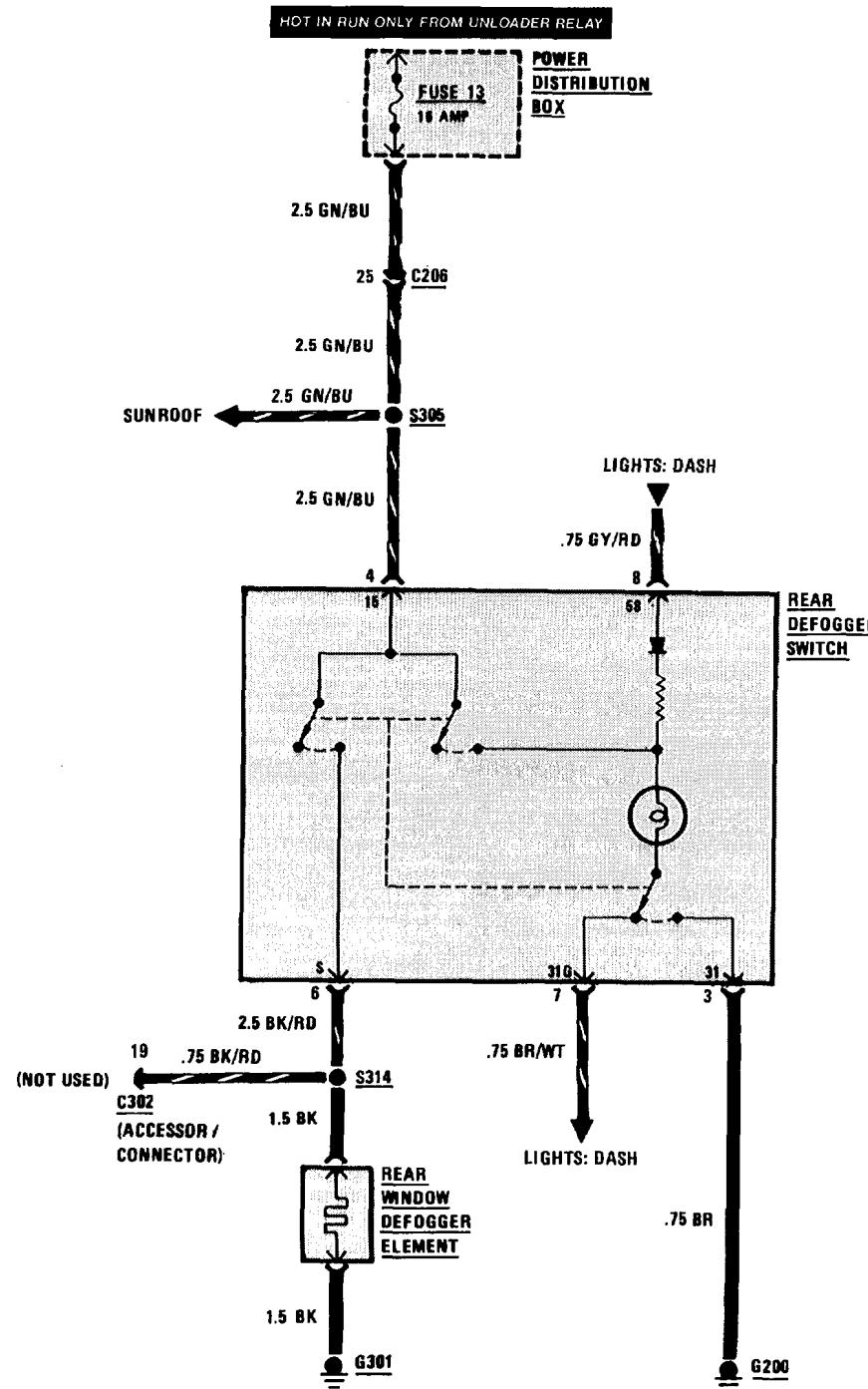


(For Component Locations See Page 206)



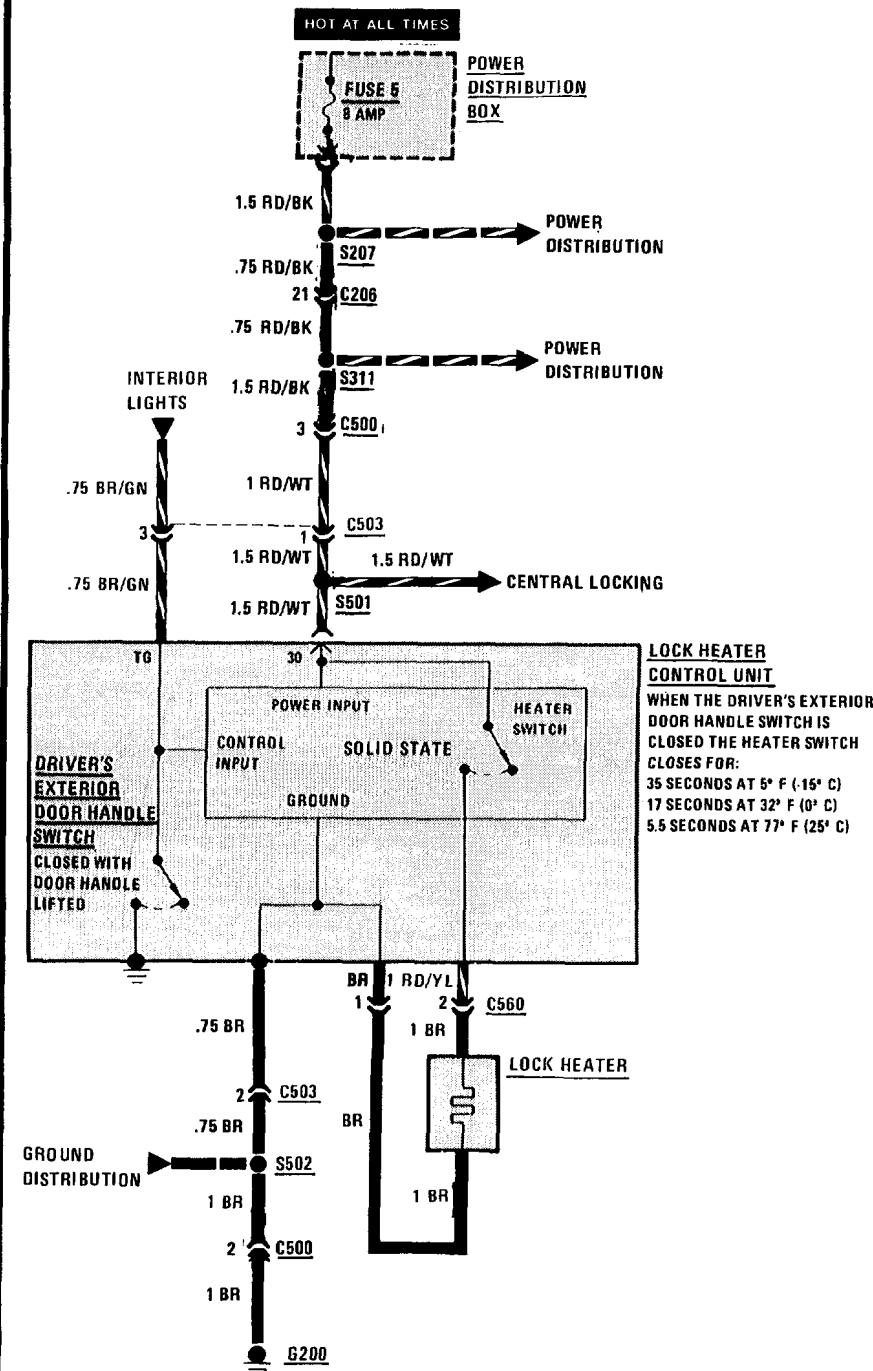
## REAR DEFOGGER

(For Component Locations See Page 211)

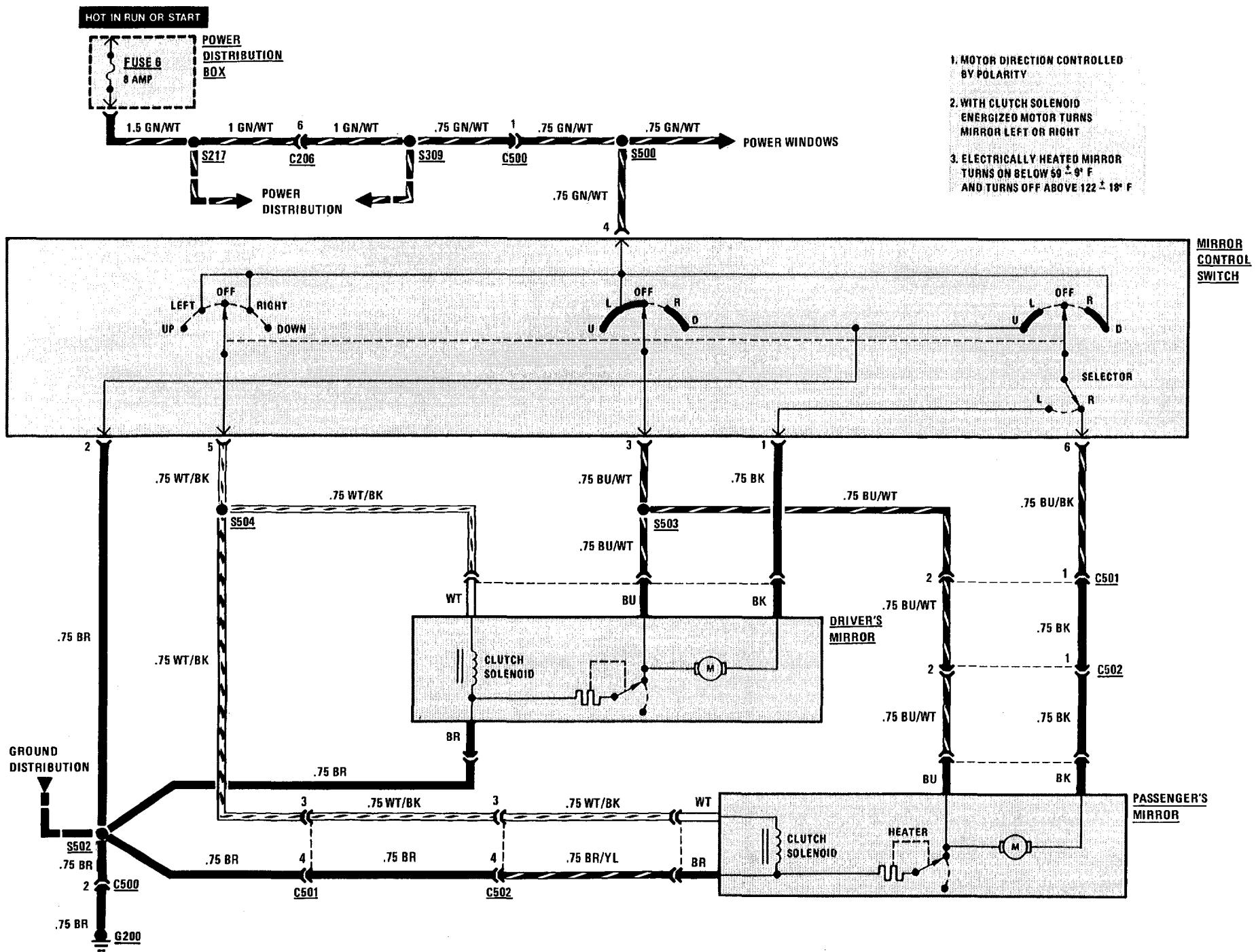


## HEATED DOOR LOCK

(For Component Locations See Page 211)

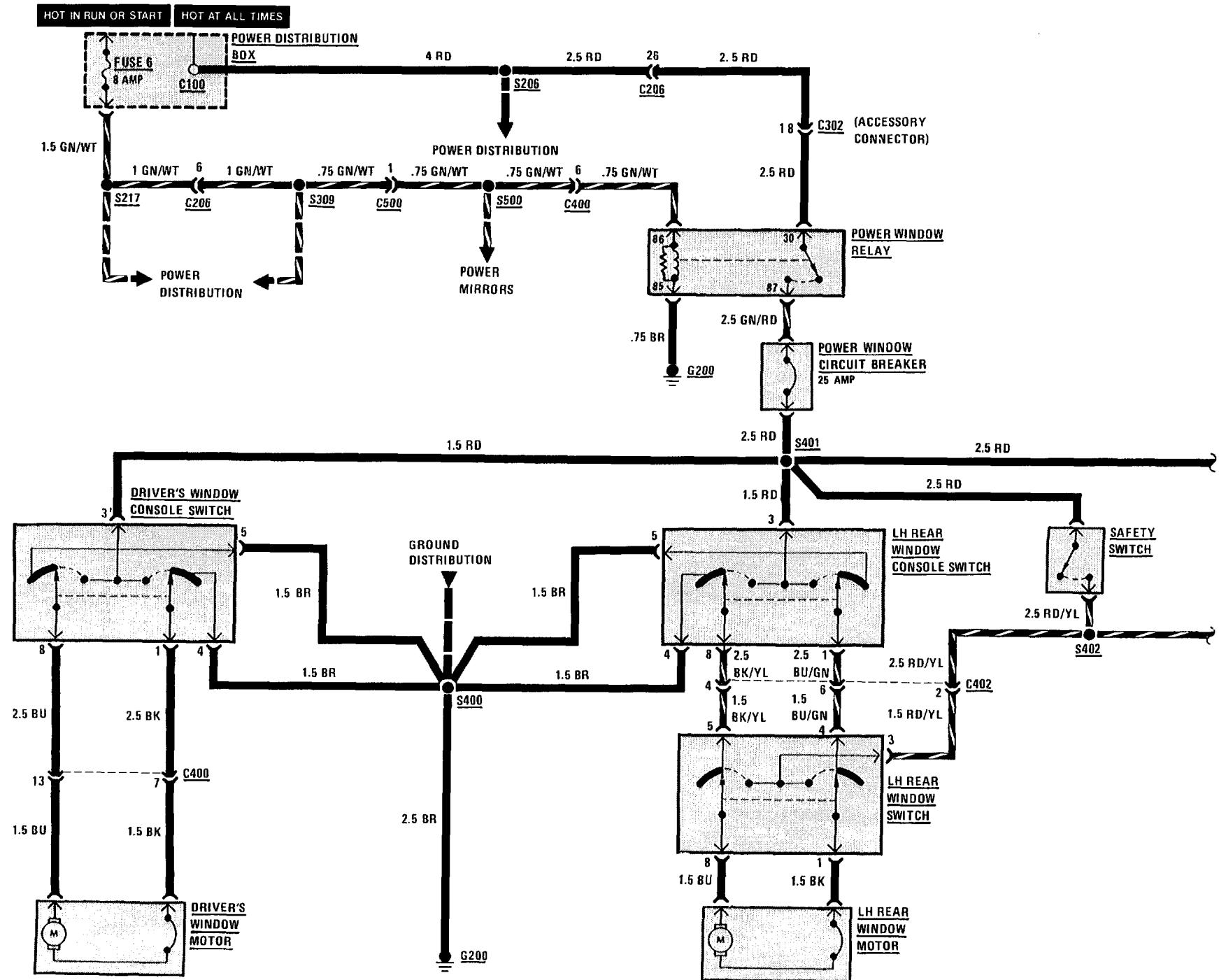


(For Component Locations See Page 210)

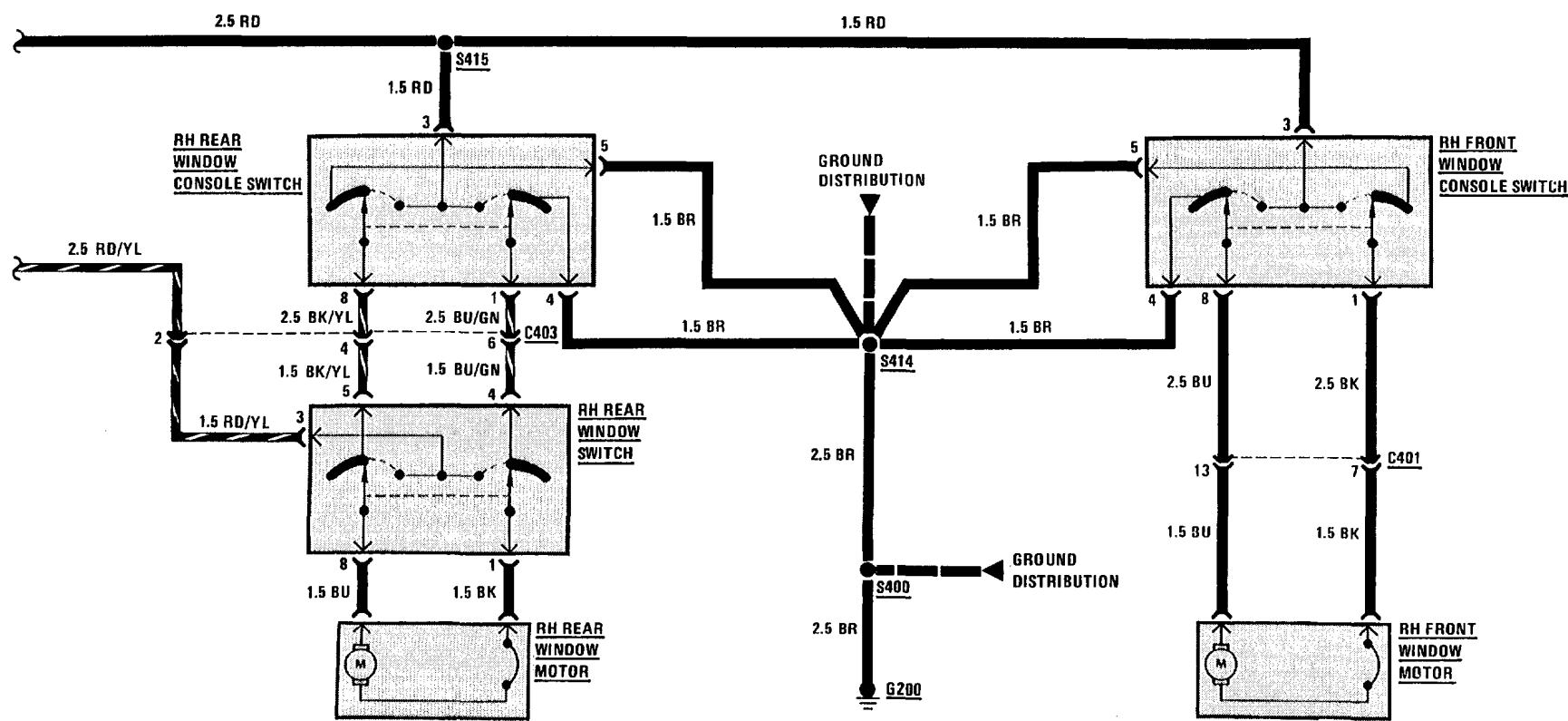


## **140 POWER WINDOWS**

(For Component Locations See Page 210)

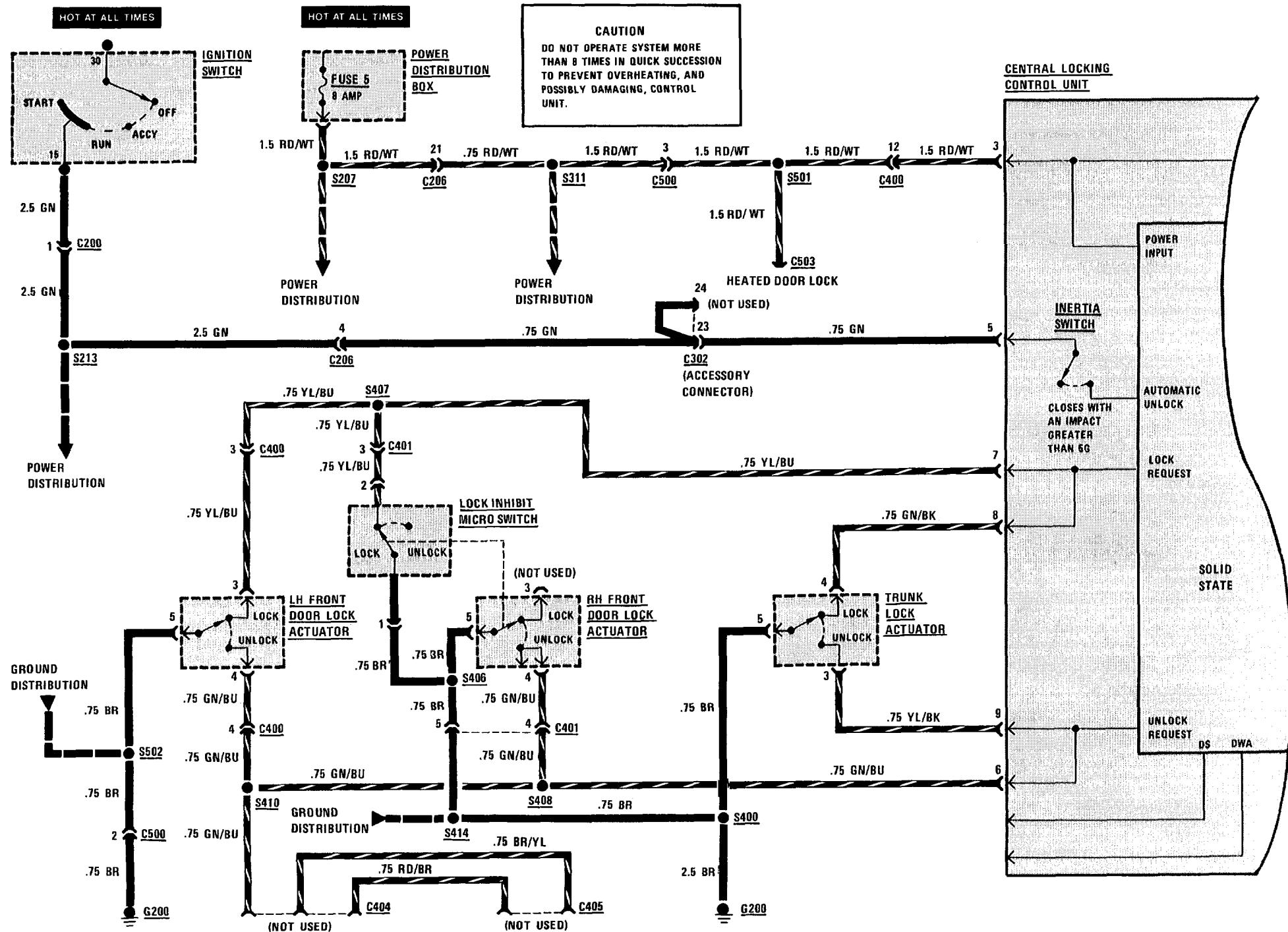


(For Component Locations See Page 210)

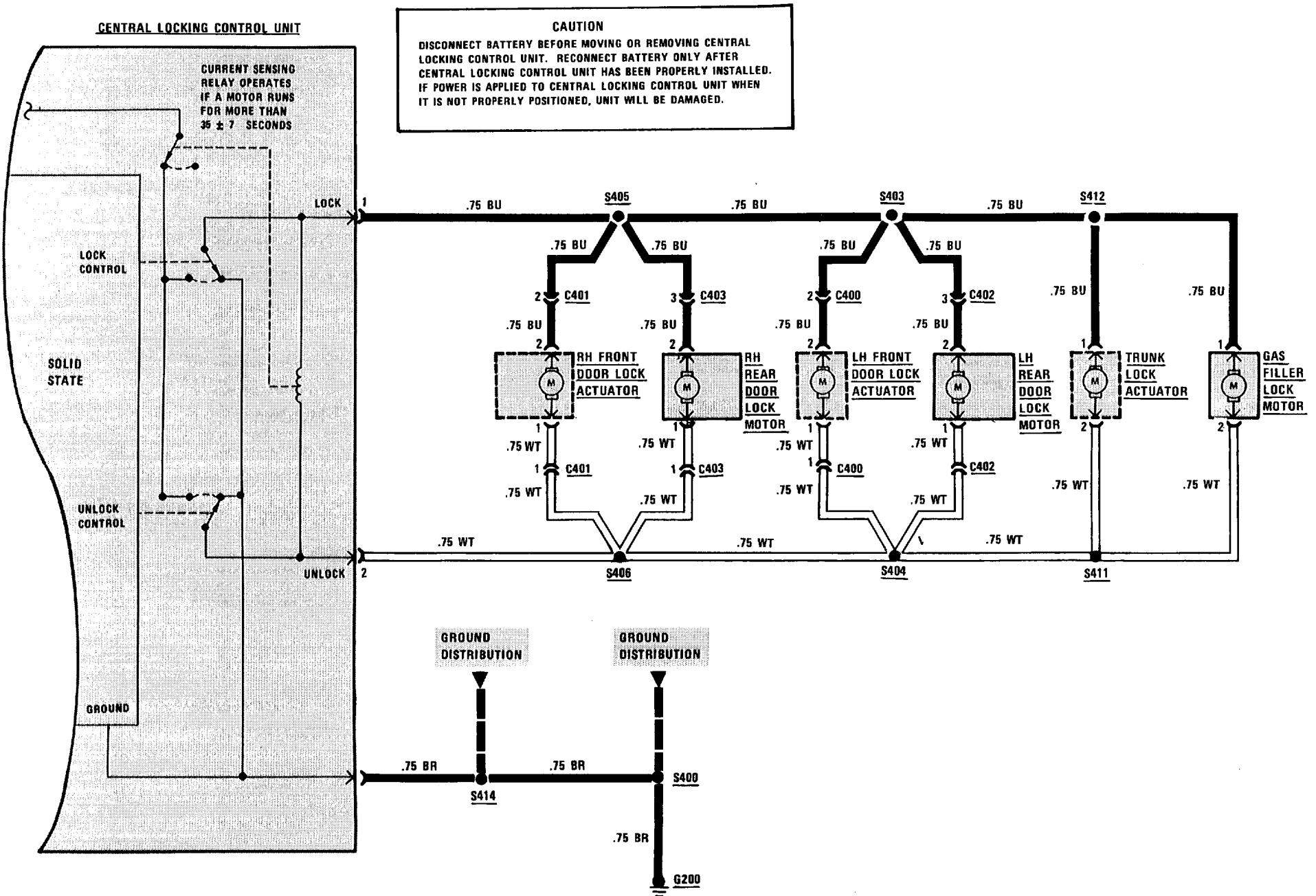


# 142 CENTRAL LOCKING (SELECT)

(For Component Locations See Page 202)

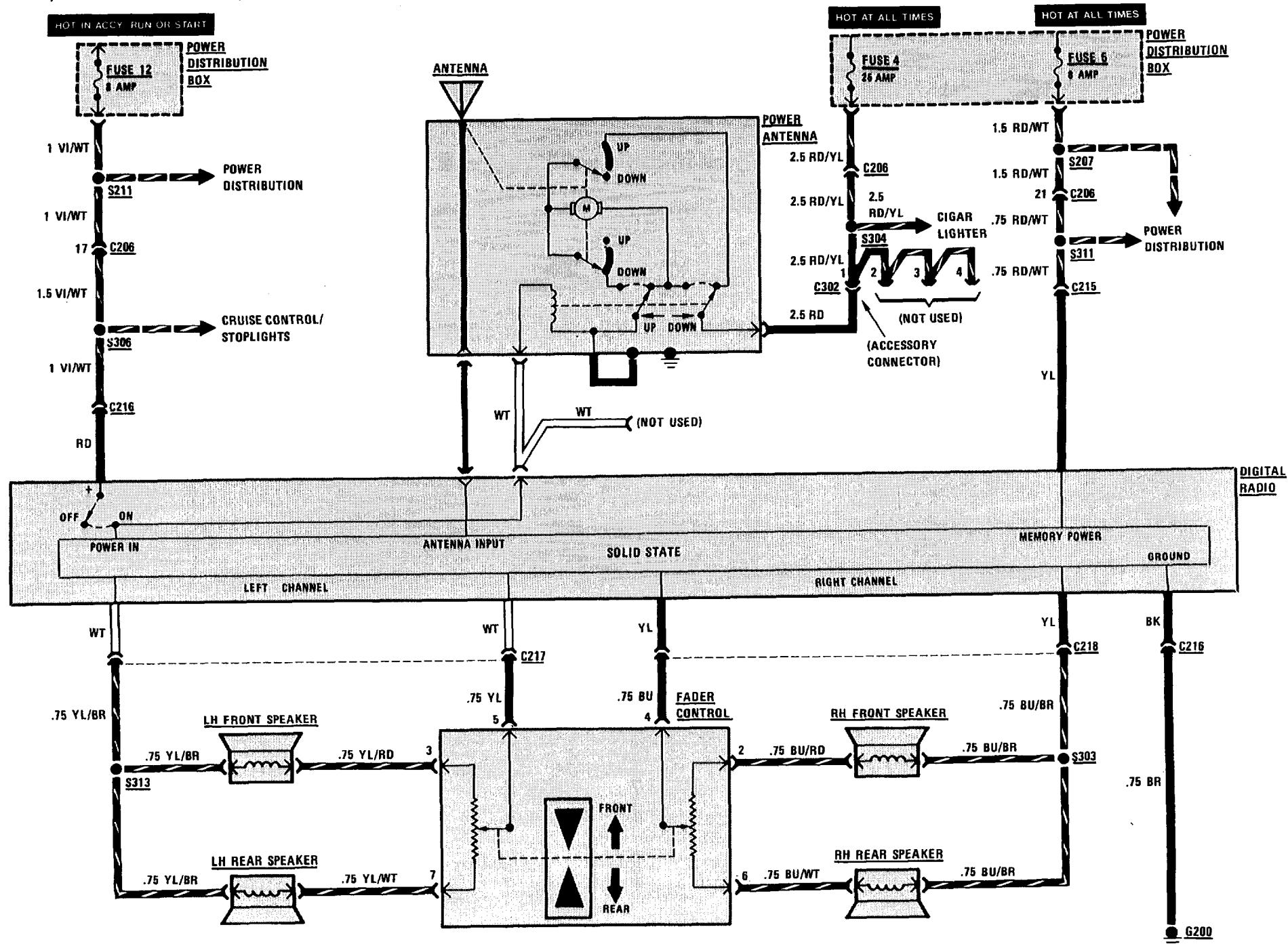


(For Component Locations See Page 202)

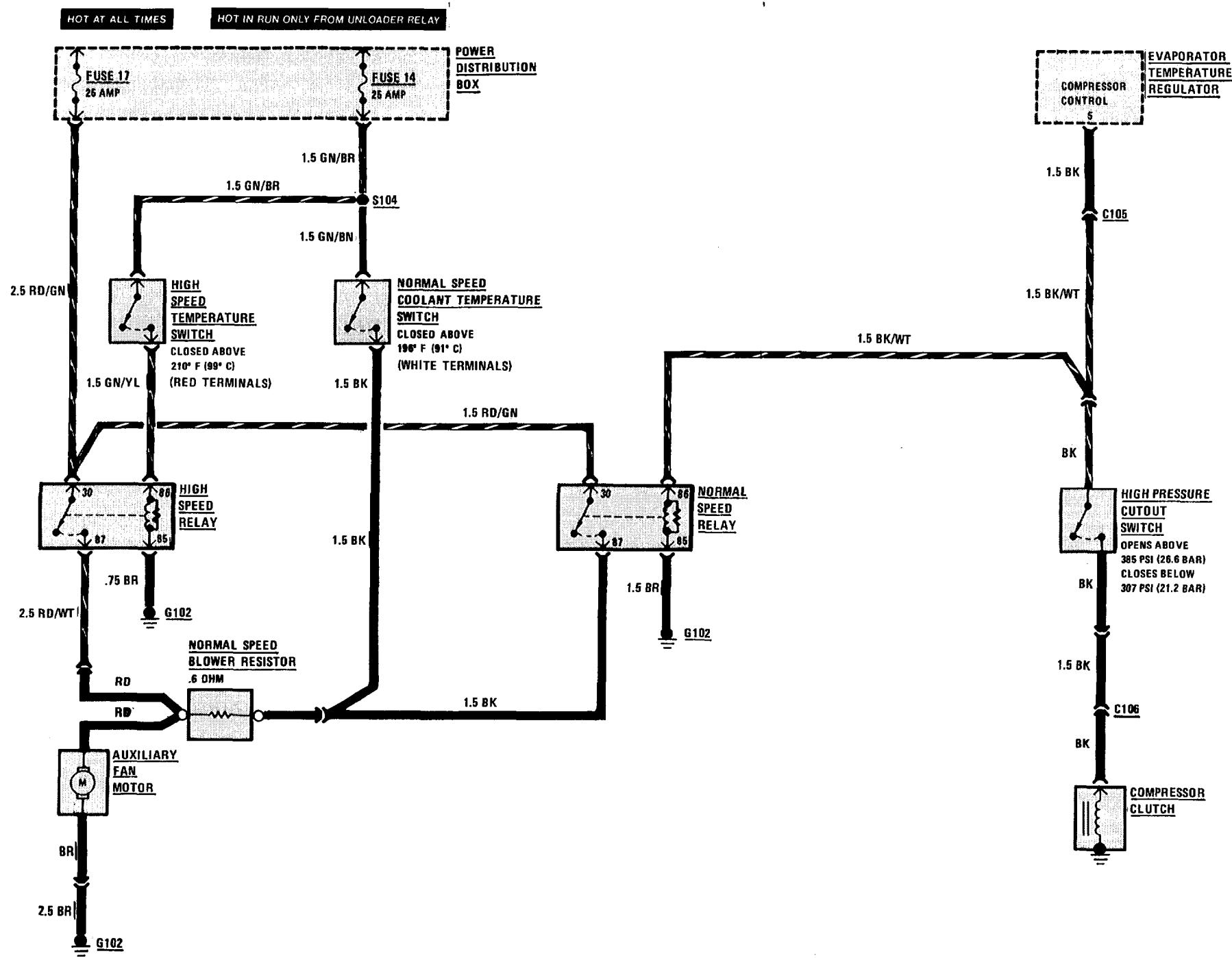


# 144 RADIO/POWER ANTENNA

(For Component Locations See Page 211)

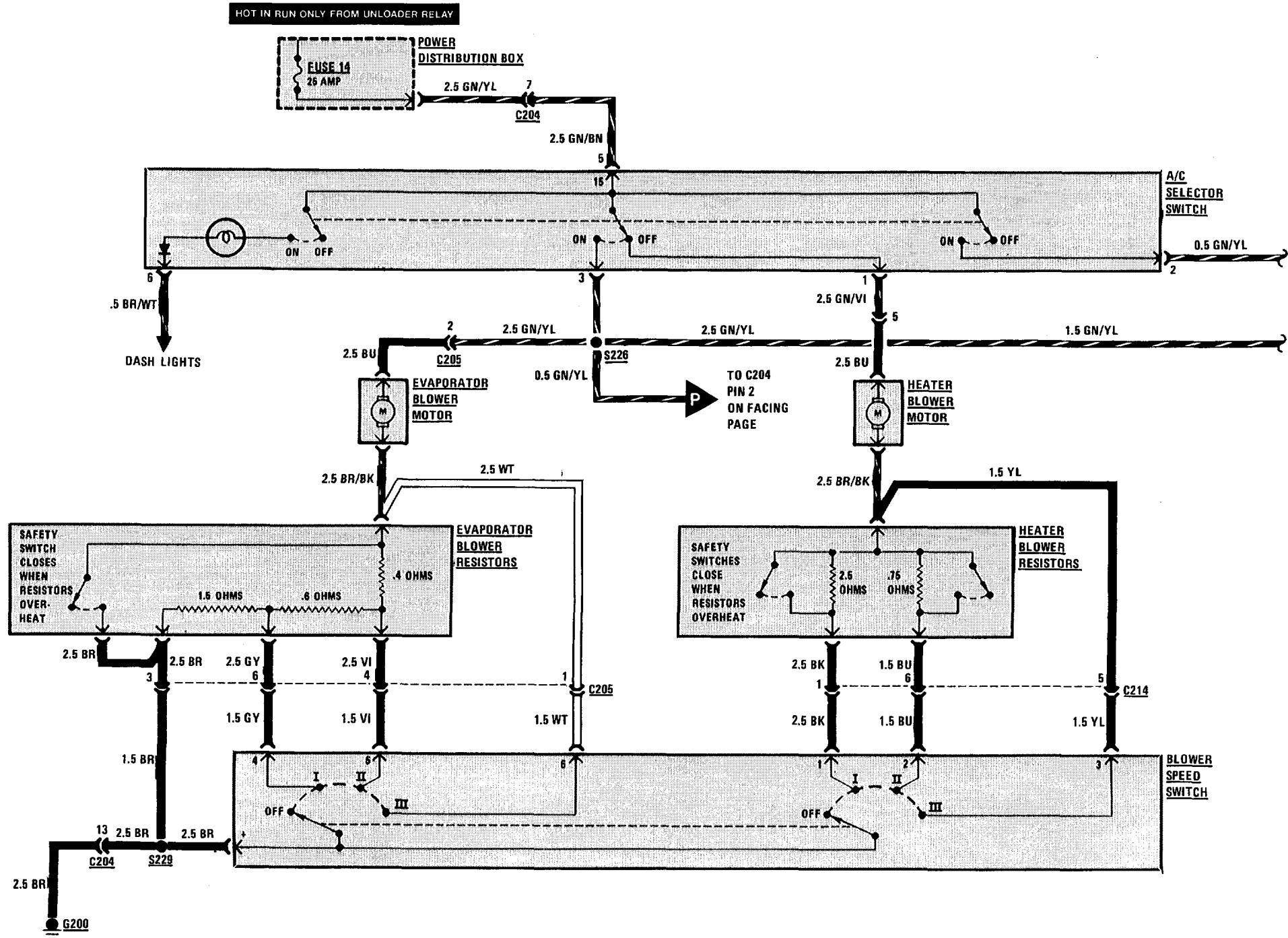


(For Component Locations See Page 201)

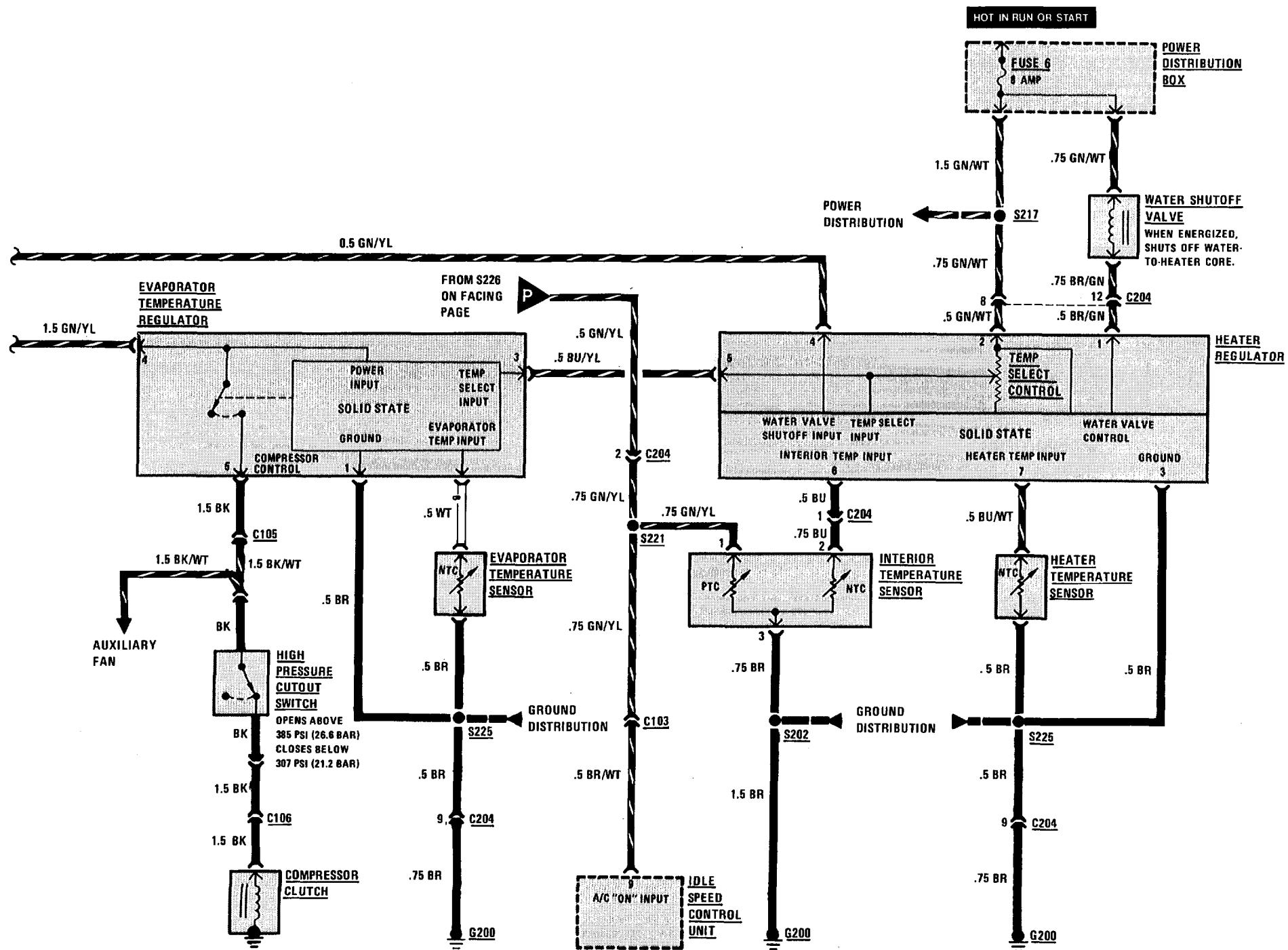


# 146 HEATER/AIR CONDITIONING (BLOWER)

(For Component Locations See Page 205)

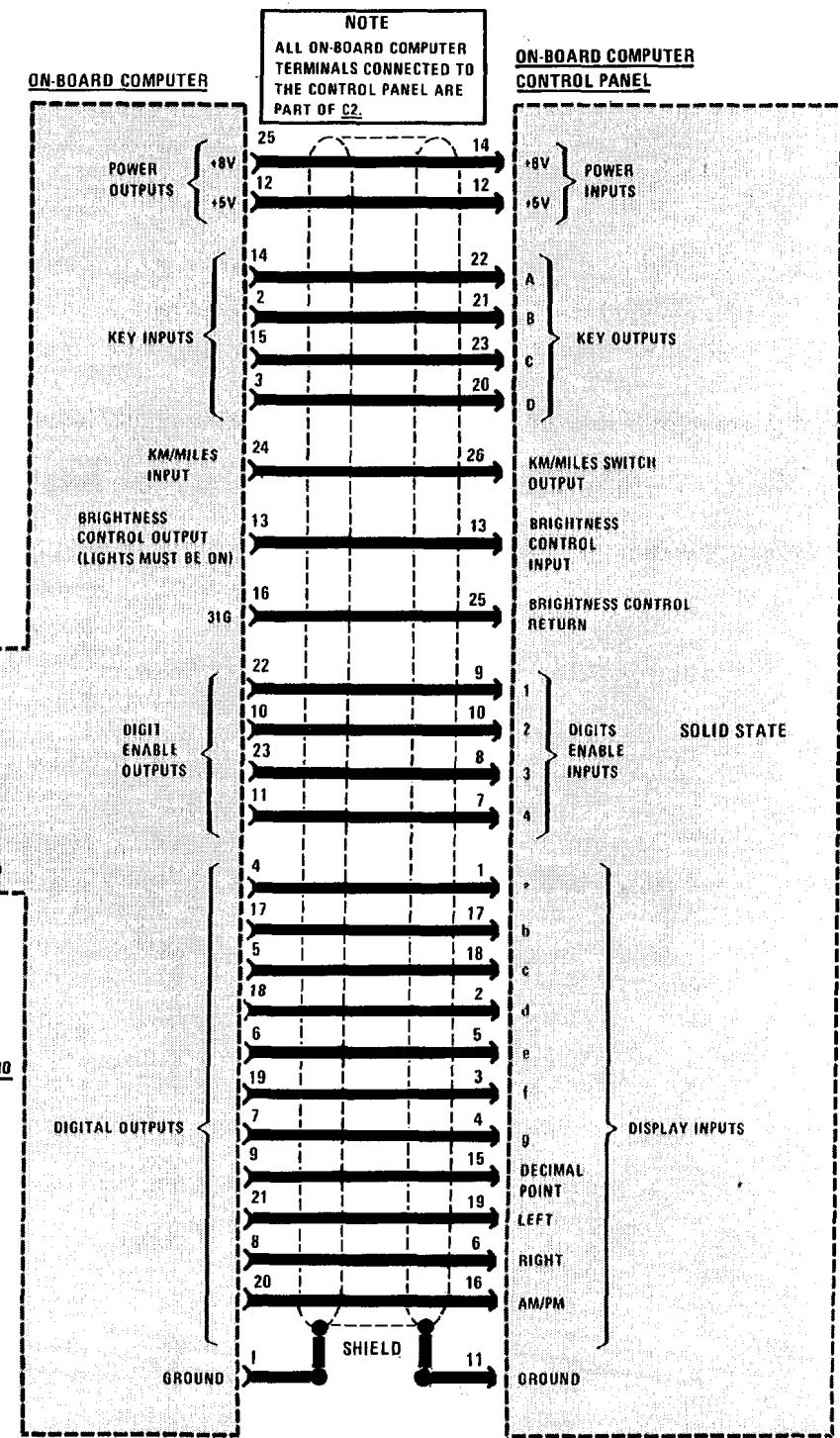
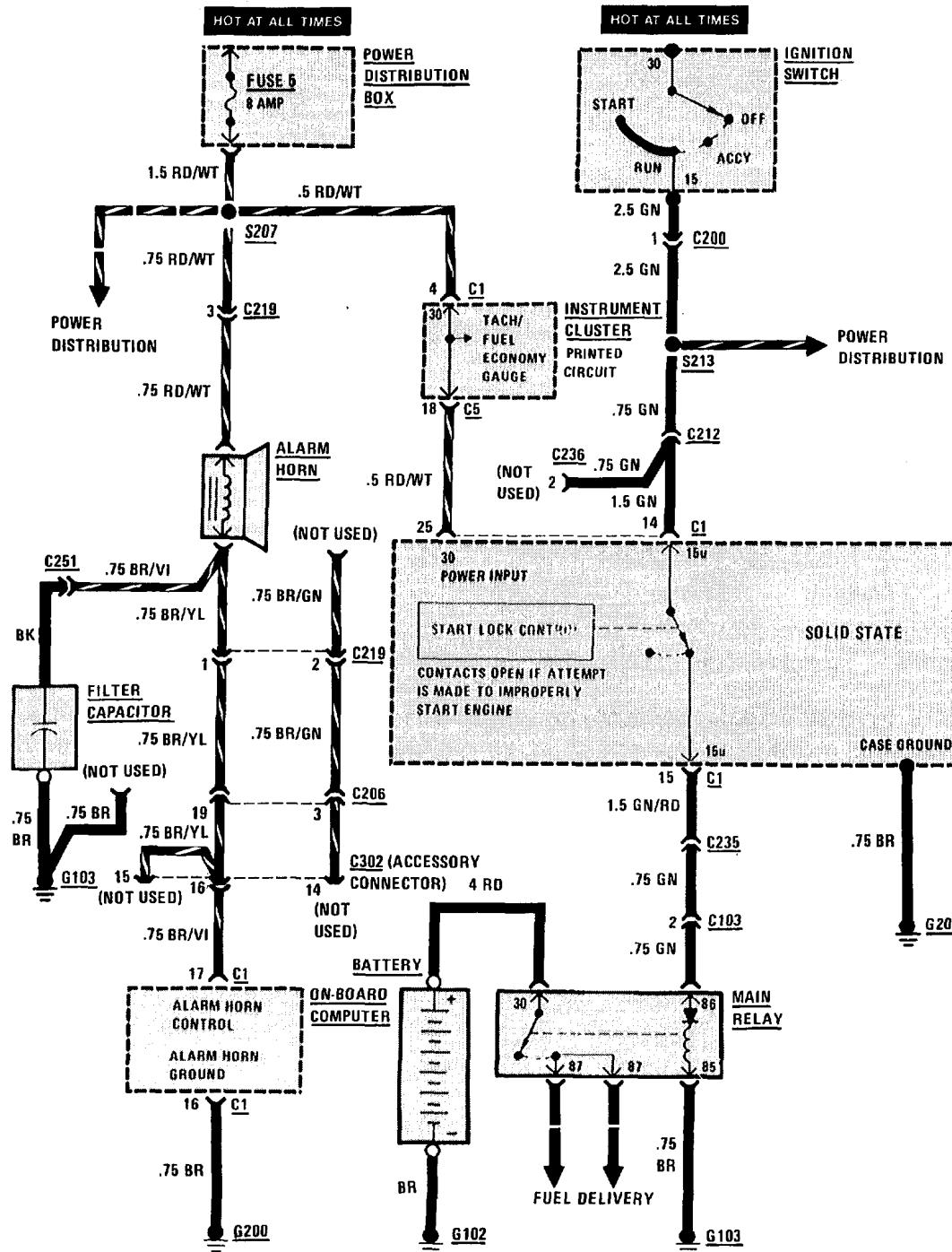


(For Component Locations See Page 205)

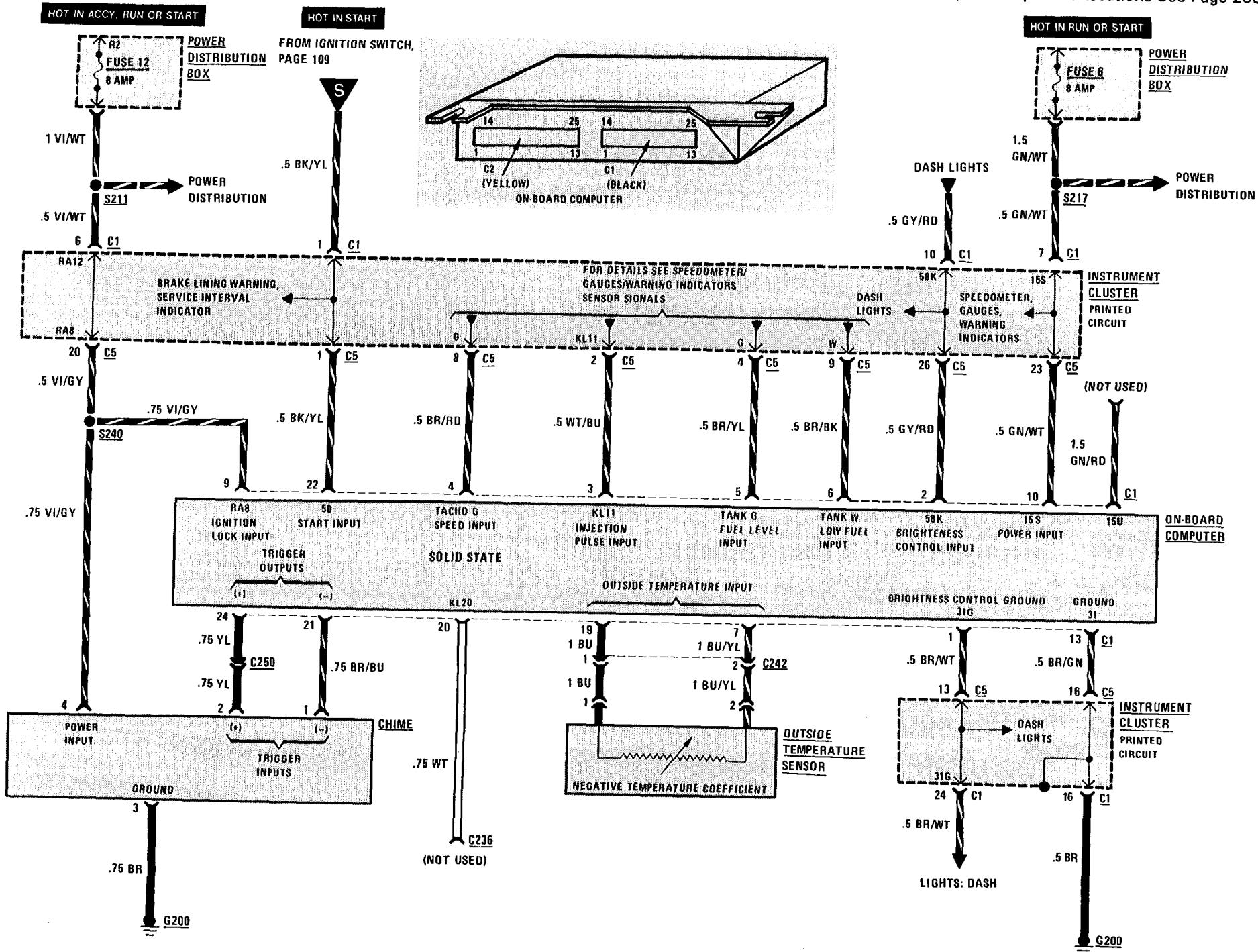


# 148 ON-BOARD COMPUTER

(For Component Locations See Page 209)

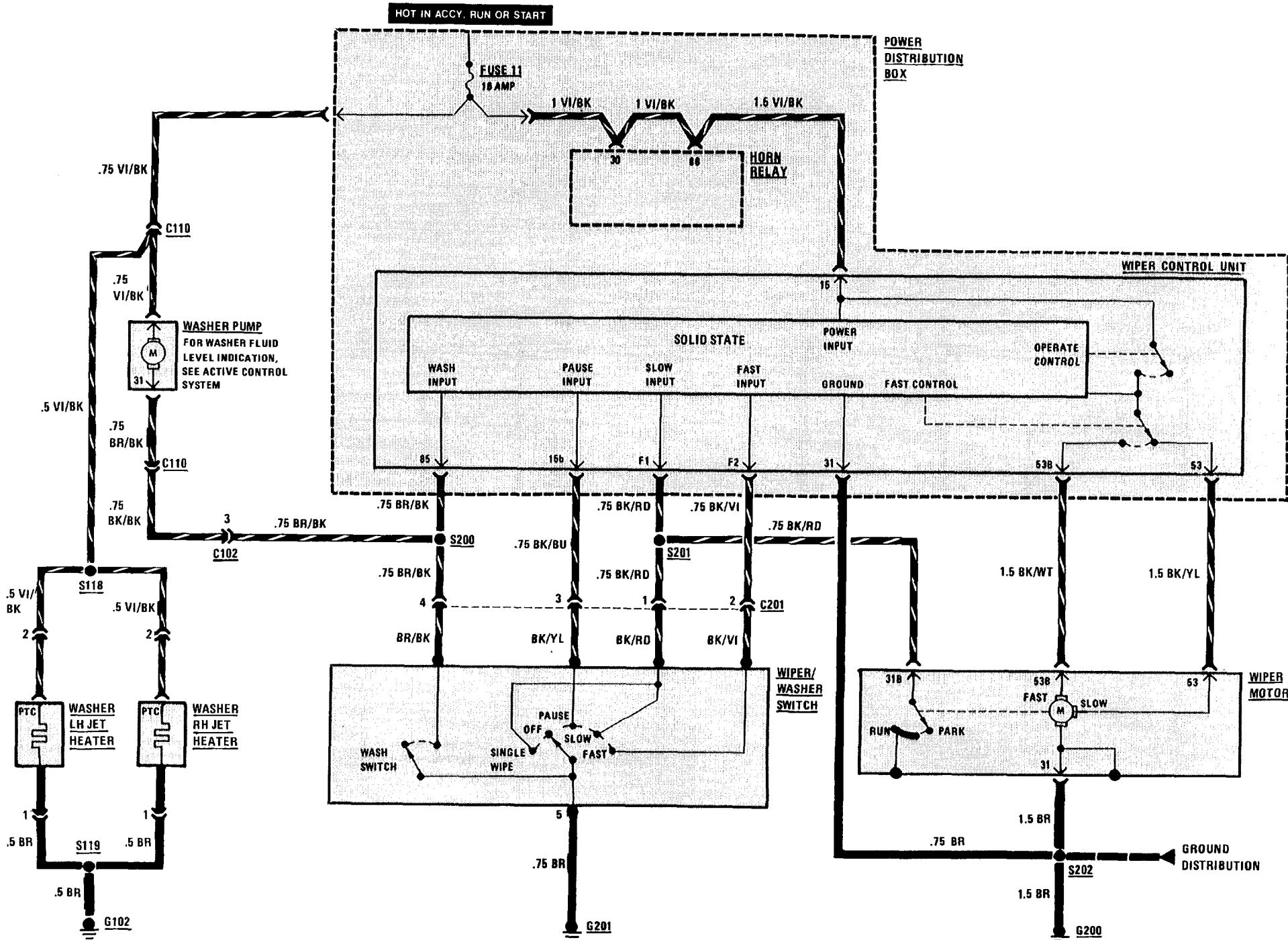


(For Component Locations See Page 209)



# 150 WIPER/WASHER AND HEATER WASHER JETS

(For Component Locations See Page 217)



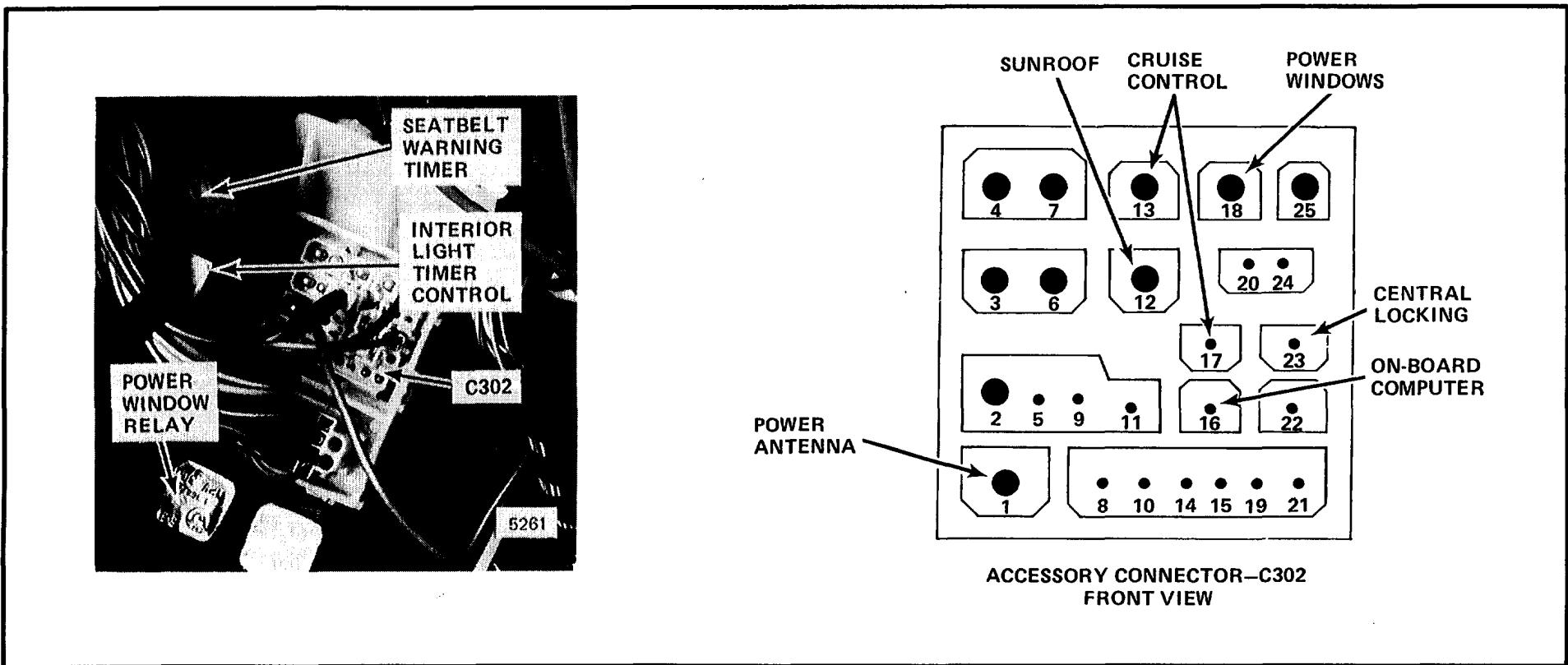
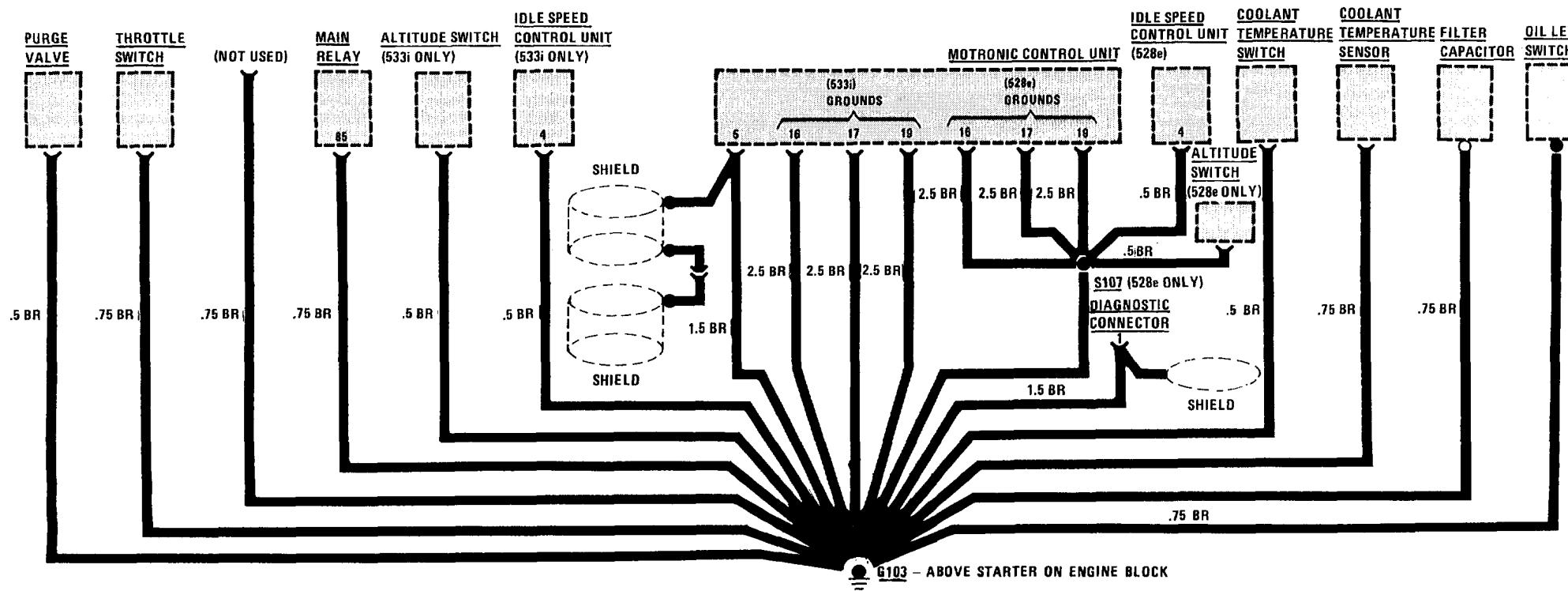
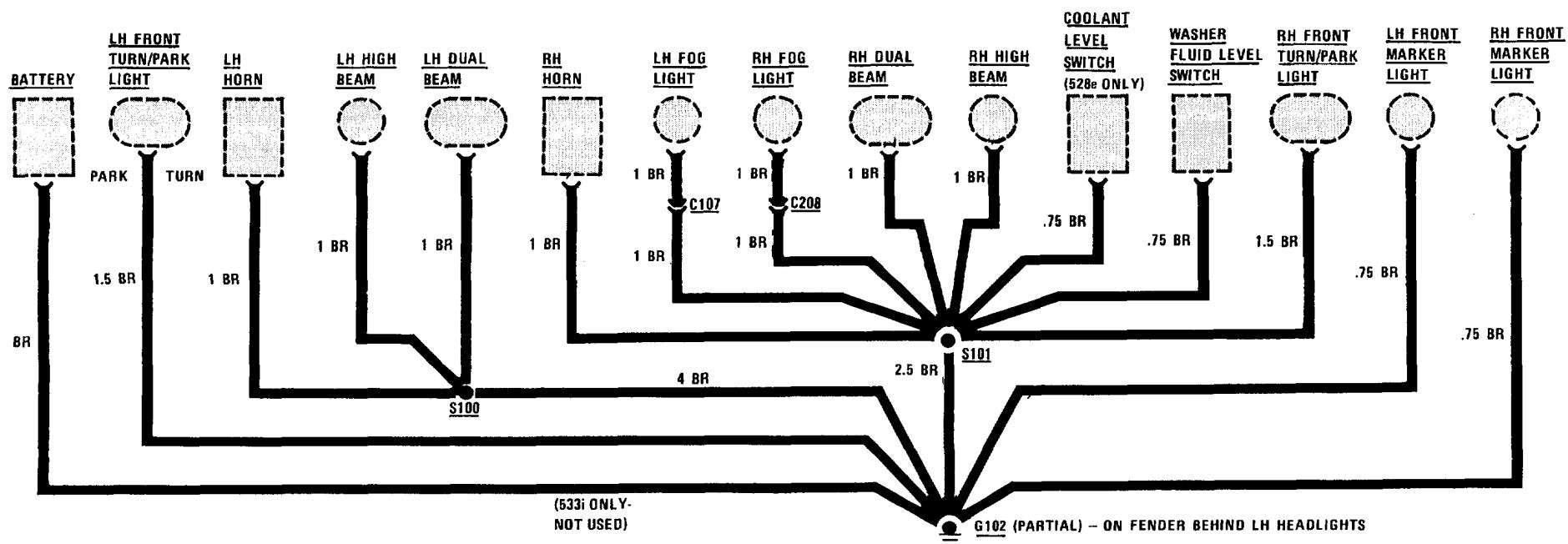
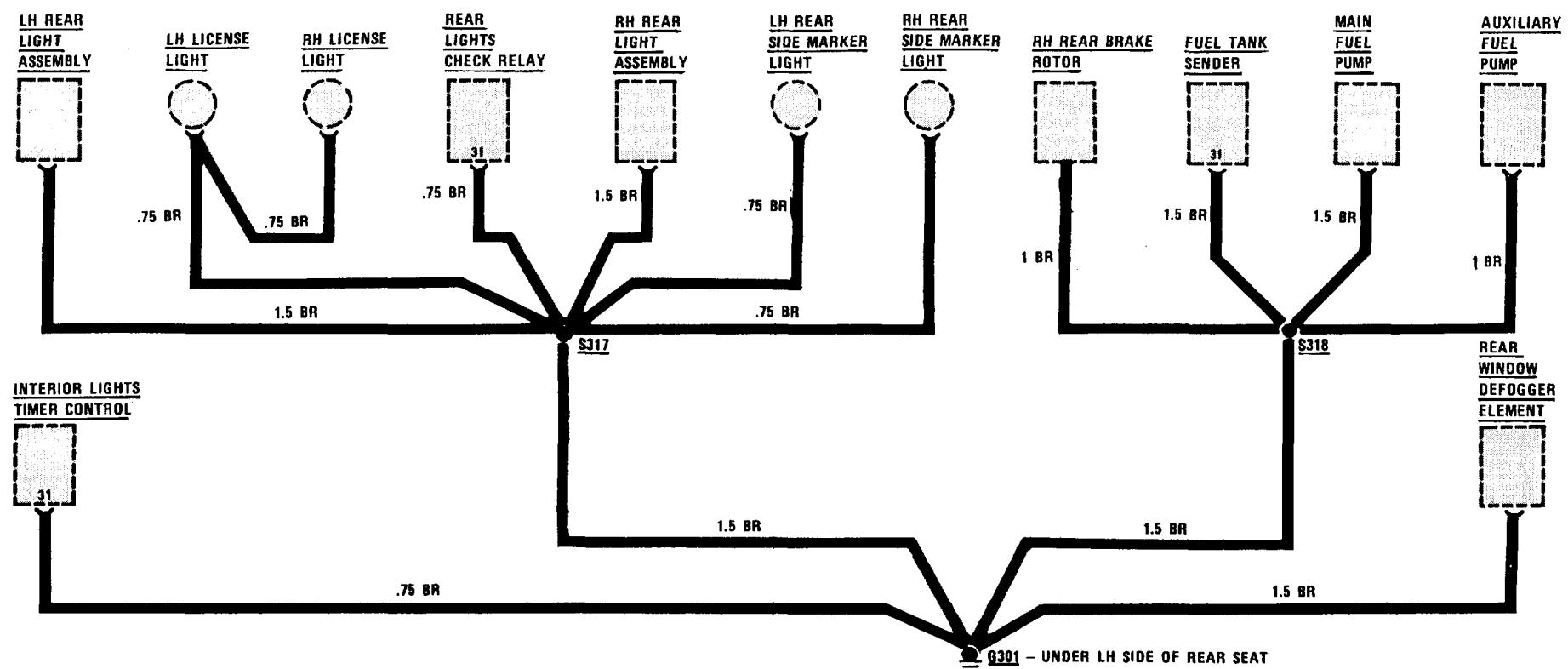
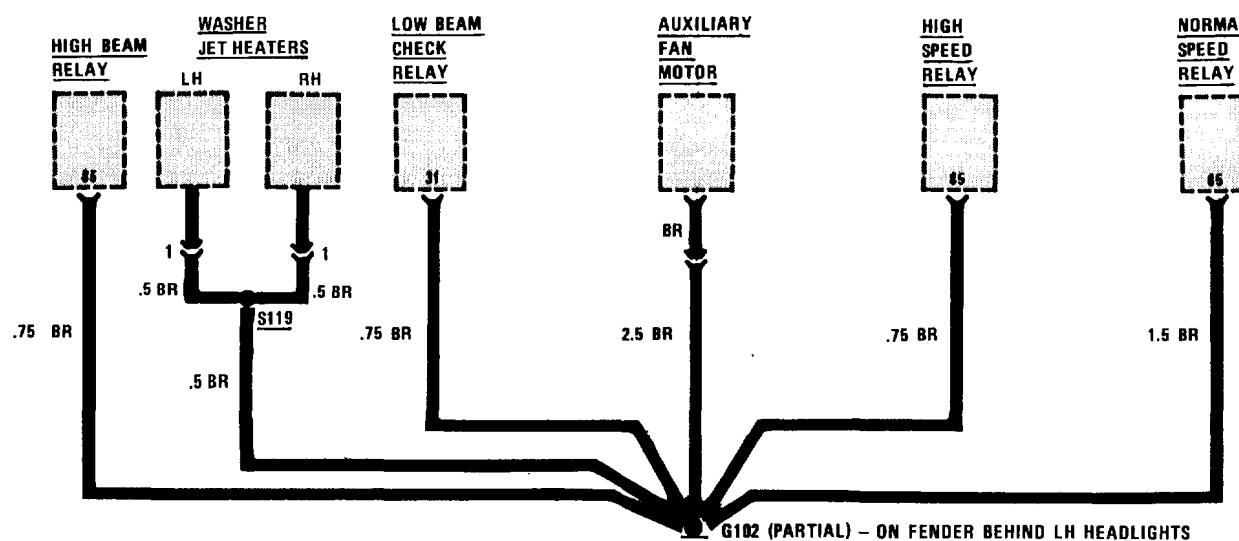
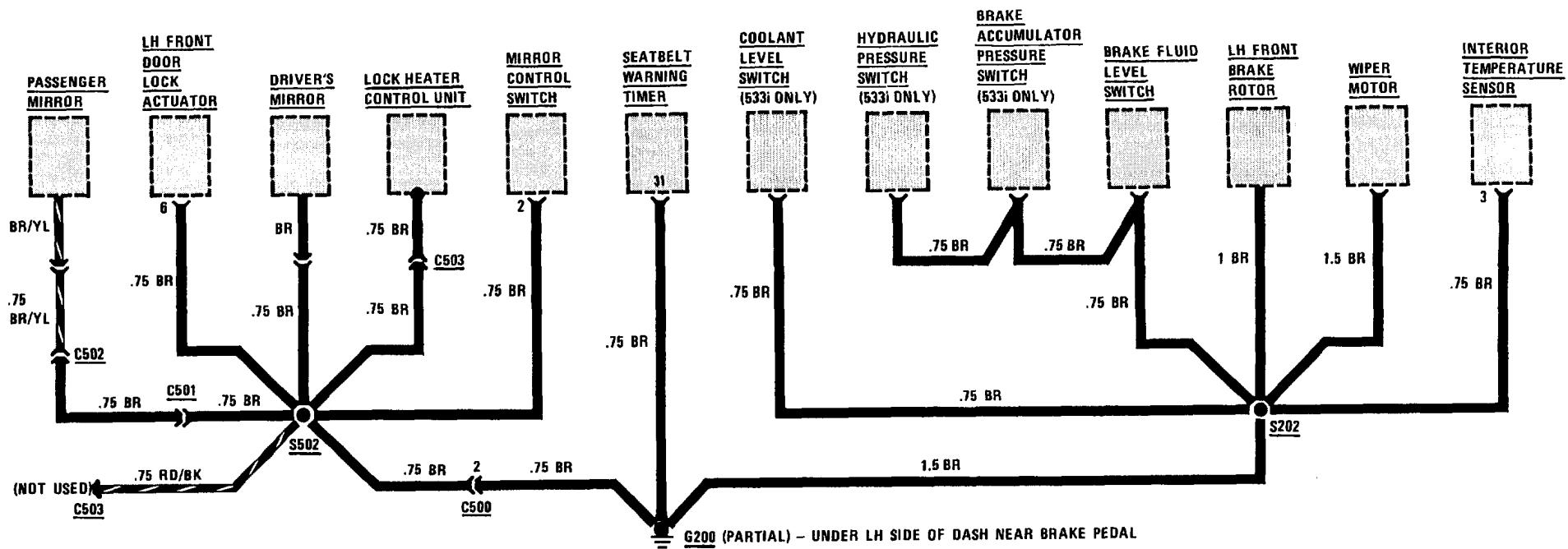
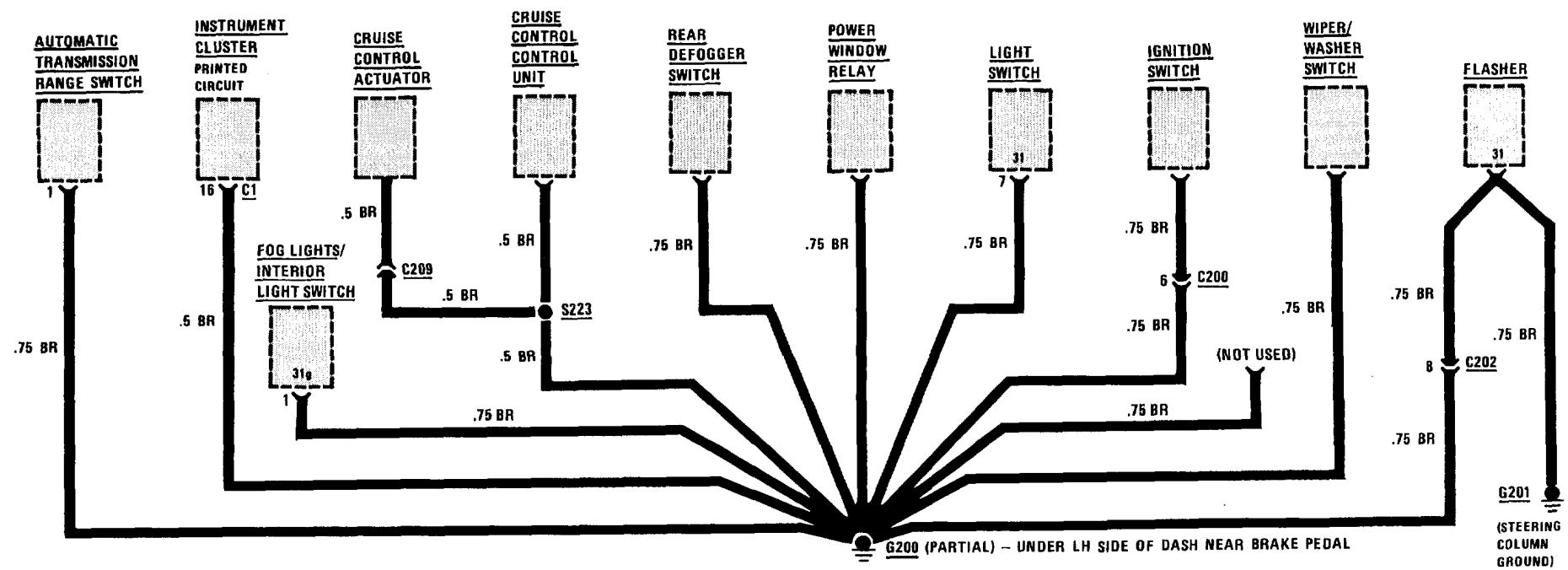


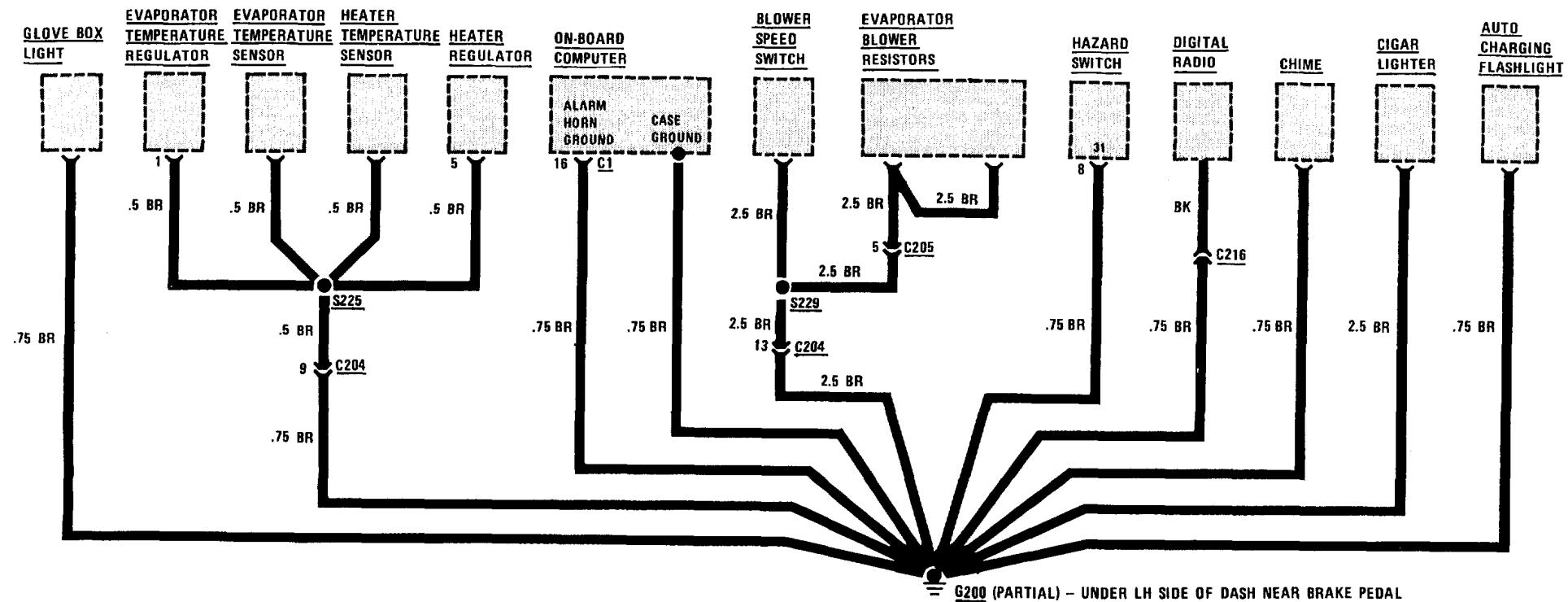
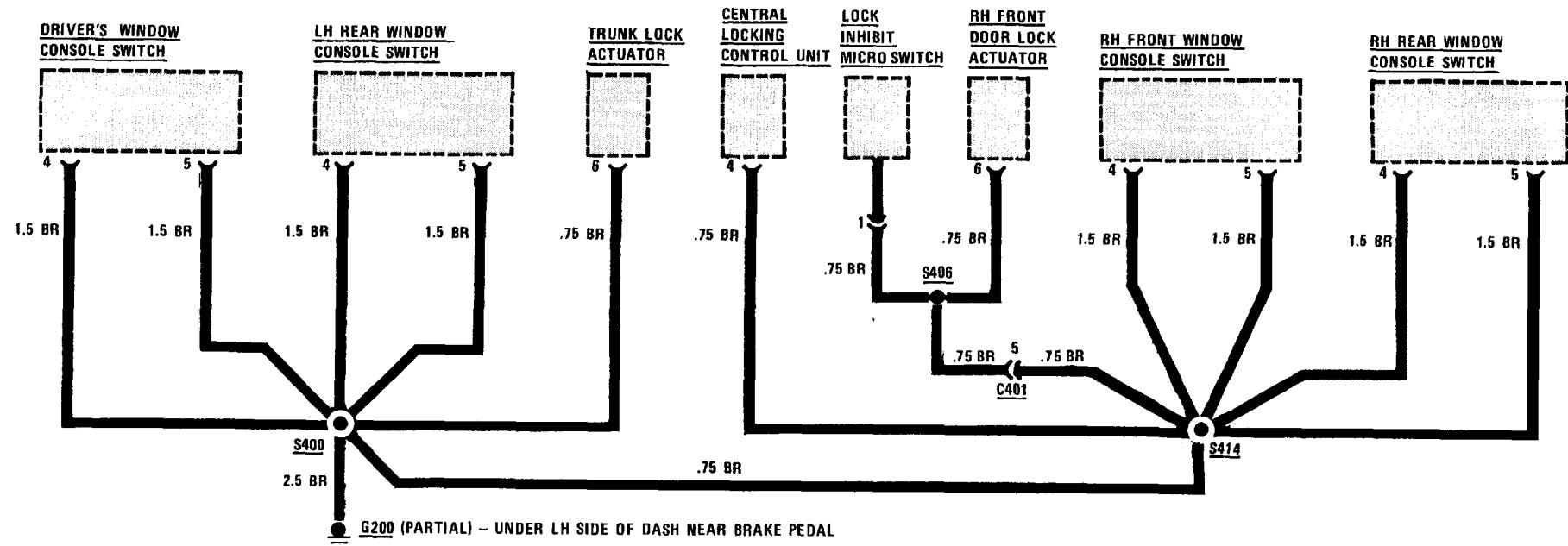
Figure 1 - Under Left Side Of Dash

## 152 GROUND DISTRIBUTION (G102, G103)









## ACTIVE CHECK CONTROL

Active Check Control Unit.....	Above rear view mirror .....	119-1
Brake Switch .....	Above brake pedal .....	213-2
Coolant Level Switch (528 e) ...	On RH front wheel well, in coolant reservoir .....	212-3
Coolant Level Switch (533 i) ...	On LH front wheel well, in coolant reservoir .....	212-6
Low Beam Check Relay.....	Attached to power distribution box.....	102-1
Oil Level Sensor .....	Bottom of engine oil pan .....	210-2
Power Distribution Box .....	On LH front wheel well .....	102-1
Rear Lights Check Relay.....	Mounted on trunk lock support.....	201-1
Seatbelt Warning Timer.....	Under LH side of dash .....	212-1
Washer Fluid Level Switch ....	In reservoir, behind RH headlights .....	211-1
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i).....	In power distribution box .....	215-2
C102 (7 pin) .....	In power distribution box .....	205-1
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
G102 (Main Body Ground) ....	On fender well behind LH headlights .....	203-1
G103 (Engine Ground) (533 i) .	Top rear of engine .....	202-1
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket	
G301 (Rear Interior Ground) ...	Under LH side of rear seat.....	208-1

## AUXILIARY FAN

Auxiliary Fan Motor .....	Forward of radiator.....	214-3
Evaporator Temp. Regulator ...	On LH side of heater/evaporator housing .....	214-5
High Pressure Cut-Out Switch ..	On receiver-drier behind RH headlights .....	207-1
High Speed Cool. Temp. Switch	On upper LH side of radiator (red terminals).....	214-2
High Speed Relay .....	Attached to power distribution box.....	102-1
Normal Speed Blower Resistor .	Ahead of radiator, on auxiliary fan shield .....	214-3
Normal Speed Cool. Temp. Switch	On upper LH side of radiator (white terminals)	214-2
Normal Speed Relay.....	Attached to power distribution box.....	102-1
Power Distribution Box .....	On LH front wheel well .....	102-1
C105 (1 pin) (528 e) .....	At RH wheel well, below coolant reservoir .....	212-3
C105 (1 pin) (533 i) .....	At RH wheel well, below coolant reservoir .....	
C106 (1 pin) (528 e) .....	Near air conditioning compressor .....	214-4
C106 (1 pin) (533 i) .....	Near air conditioning compressor	
G102 (Main Body Ground) ....	On fender well behind LH headlights .....	203-1

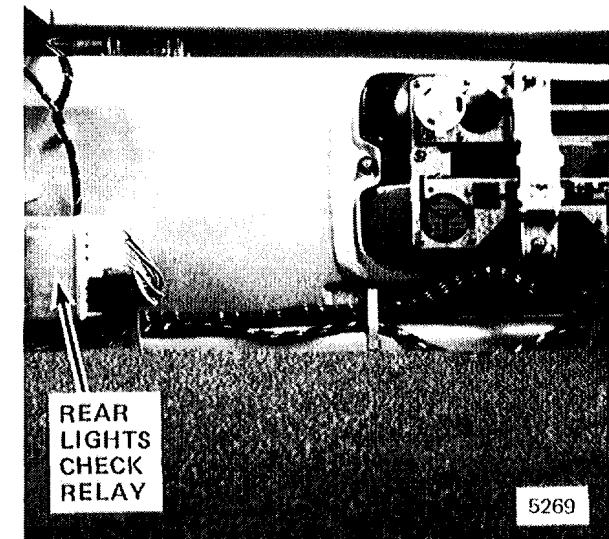


Figure 1 - Rear LH Side Of Trunk

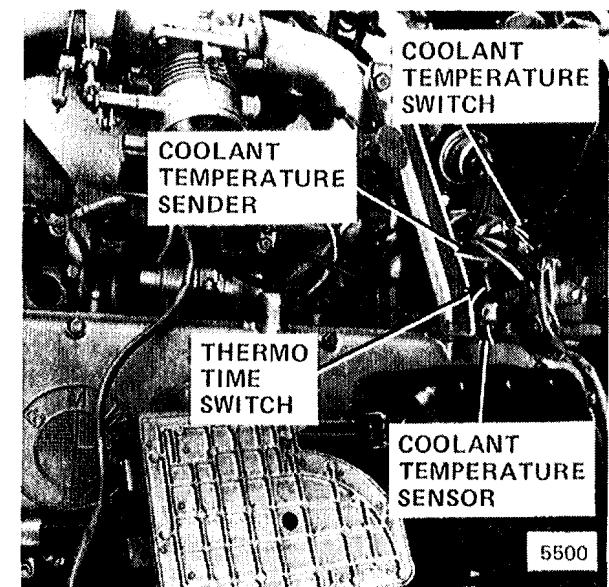


Figure 2 - Top Front Of 533i Engine

### BACKUP LIGHTS

Auto. Trans. Range Switch .....	At base of shift lever .....	215-5
Backup Light Switch .....	On LH side of transmission	
Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C301 (2 pin) .....	In center console, ahead of shift lever	
G301 (Rear Interior Ground) ..	Under LH side of rear seat.....	208-1

### BRAKE LINING WARNING

Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
G200 (Front Interior Ground)..	Under LH side of dash, near brake bracket	
G301 (Rear Interior Ground) ..	Under LH side of rear seat.....	208-1

### CENTRAL LOCKING

Central Locking Control Unit ..	Above right front speaker	
Gas Filler Lock Motor .....	In trunk, right of power antenna	
Ignition Switch.....	Upper part of steering column	
LH Front Door Lock Actuator ..	In LH front door	
LH Rear Door Lock Motor ...	In LH rear door	
Lock Inhibit Micro Switch .....	In RH front door near door lock cylinder	
Power Distribution Box .....	On LH front wheel well .....	102-1
RH Front Door Lock Actuator ..	In RH front door	
RH Rear Door Lock Motor ...	In RH rear door	
Trunk Lock Actuator .....	In rear panel of trunk	
C200 (10 pin).....	On LH side of steering column .....	203-2
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector) ..	Under LH side of dash .....	212-1
C400 (13 pin).....	Behind RH front speaker	
C401 (13 pin).....	Behind RH front speaker .....	213-3
C402 (6 pin) .....	At LH rear door grommet	
C403 (6 pin) .....	At RH rear door grommet	
C404 (4 pin) .....	In bottom rear of driver's door .....	202-2
C405 (2 pin) .....	In trunk near trunk lock.	
C500 (6 pin) .....	Behind LH front speaker	
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket	

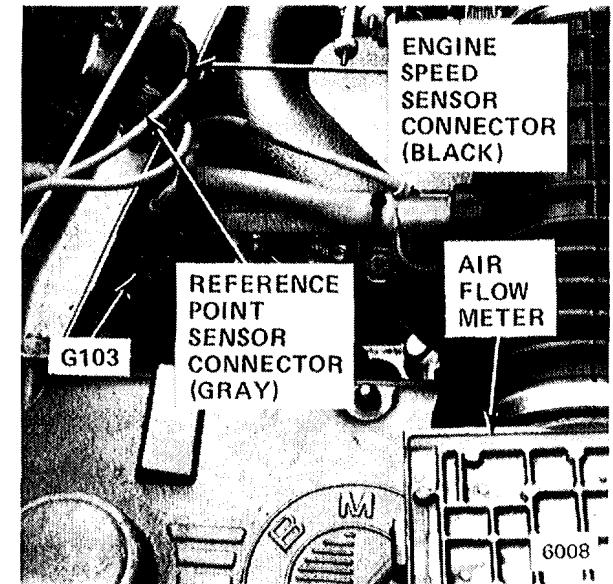


Figure 1 - Top Retail Of 533i Engine

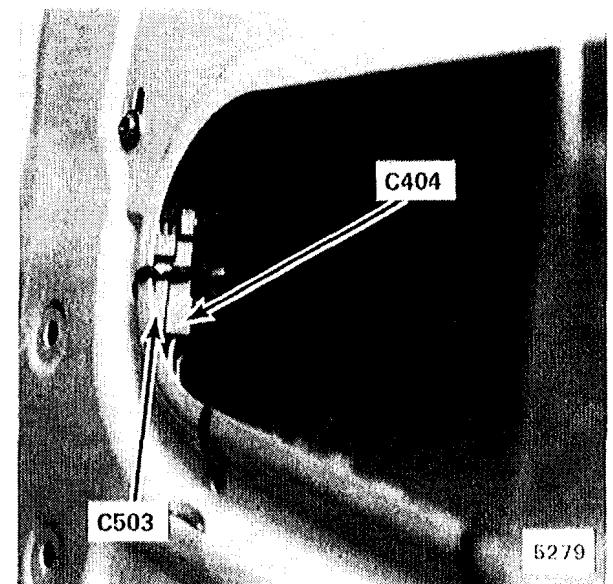


Figure 2 - Inside Driver's Door

## CHARGING SYSTEM

Diagnostic Connector (528 e)	LH side of engine .....	104-1
Diagnostic Connector (533 i)	Top front of engine .....	104-1
Ignition Switch.....	Upper part of steering column.	
Power Distribution Box .....	On LH front wheel well .....	102-1
Starter .....	Lower rear LH side of engine	
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i).....	In power distribution box .....	215-2
C200 (10 pin).....	On LH side of steering column .....	203-2
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector)....	Under LH side of dash .....	212-1
G102 (Main Body Ground) ....	On fender well behind LH headlights .....	203-1

## CIGAR LIGHTER/GLOVE BOX LIGHT/AUTO-CHARGING FLASHLIGHT

Auto-Charging Flashlight .....	In glove box	
Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector)....	Under LH side of dash .....	212-1
G200 (Front Interior Ground)...	Under LH side of dash, near brake bracket	

## CRUISE CONTROL/STOP LIGHTS

Active Check Control Unit.....	Above rear view mirror .....	119-1
Auto. Trans. Range Switch ....	At base of shift lever .....	215-5
Brake Switch .....	Above brake pedal .....	213-2
Clutch Switch .....	Above clutch pedal	
Cruise Control Actuator (528 e)	Forward of power distribution box .....	203-1
Cruise Control Actuator (533 i)	Forward of power distribution box .....	215-2
Cruise Control Control Unit .....	Mounted on left under dash cover .....	203-2
Cruise Control Switch .....	On RH side of steering column .....	209-1
Power Distribution Box .....	On LH front wheel well .....	102-1
Rear Lights Check Relay .....	Mounted on trunk lock support .....	201-1
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
C208 (2 pin) .....	Near clutch pedal .....	206-1
C209 (7 pin) .....	Near cruise control control unit .....	203-2
C210 (4 pin) .....	On LH side of steering column .....	203-2
C301 (2 pin) .....	In center console, ahead of shift lever	
C302 (accessory connector)...	Under LH side of dash .....	212-1
G200 (Front Interior Ground)...	Under LH side of dash, near brake bracket	
G301 (Rear Interior Ground) ...	Under LH side of rear seat .....	208-1

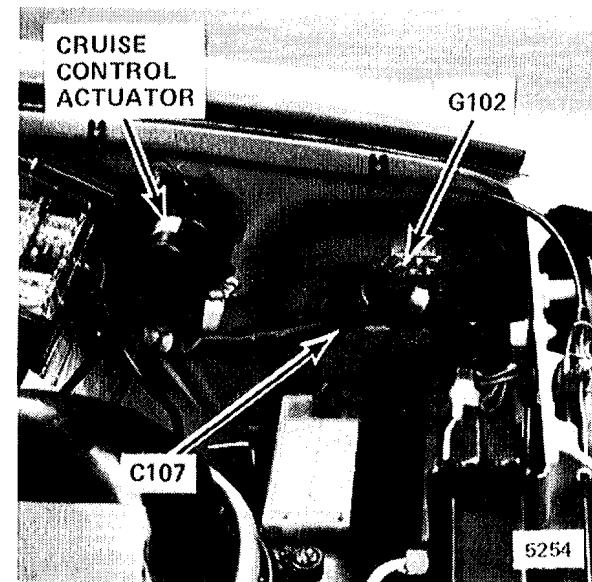


Figure 1 - Above Battery

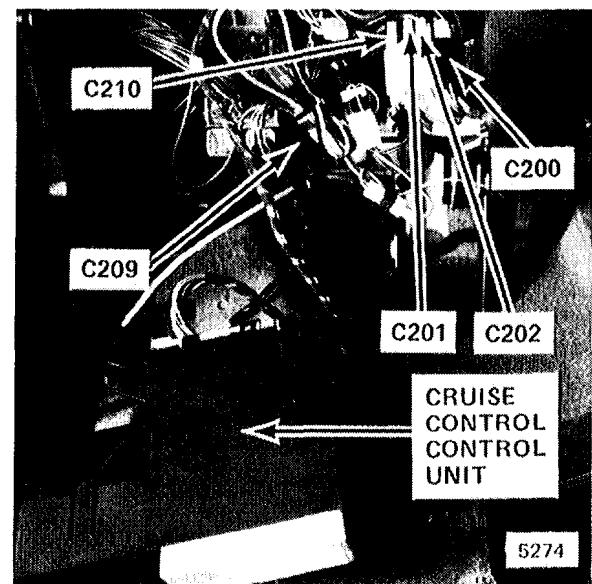


Figure 2 - Lower LH Side Of Dash

## FUEL CONTROL

Air Flow Meter (528 e) .....	LH side of engine .....	212-2
Air Flow Meter (533 i) .....	Top right side of engine .....	202-1
Altitude Switch (528e) .....	Near the air flow meter	
Altitude Switch (533i).....	Near rear corner of engine compartment	
Idle Speed Control Unit.....	Under RH side of dash, above glove box .....	204-1
Motronic Control Unit .....	Above glove box .....	204-1
Oxygen Sensor (528 e) .....	In exhaust manifold at rear of engine .....	212-3
Oxygen Sensor (533 i) .....	Rear of engine, in exhaust manifold	
G103 (Engine Ground) (528 e) ..	Above starter on engine block .....	214-1
G103 (Engine Ground) (533 i) ..	Top rear of engine .....	202-1

## FUEL DELIVERY/EVAPORATIVE CONTROL

Auxiliary Fuel Pump .....	In fuel tank, under trunk .....	213-5
Diagnostic Connector (528 e) ..	LH side of engine .....	104-1
Diagnostic Connector (533 i) ..	Top front of engine .....	104-1
Fuel Pump Relay .....	On power distribution box .....	102-1
Ignition Switch.....	Upper part of steering column	
Main Fuel Pump .....	Forward and right of differential housing	
Main Relay .....	On power distribution box .....	102-1
Motronic Control Unit .....	Above glove box .....	204-1
On-Board Computer .....	Mounted on left under dash cover	
Power Distribution Box .....	On LH front wheel well .....	102-1
Purge Valve Relay .....	On power distribution box .....	102-1
Purge Valve .....	Behind RH headlights.....	207-1
Purge Valve Relay Diode .....	In jumper harness between the purge valve relay and throttle switch	
Throttle Switch (528e) .....	Top LH side of engine, below throttle body .....	212-5
Throttle Switch (533i) .....	Top LH side of engine, below throttle body .....	213-1
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i).....	In power distribution box .....	215-2
C103 (6 pin) .....	RH side of dash near Motronic control unit.....	204-1
C200 (10 pin) .....	On LH side of steering column .....	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C212 (1 pin) .....	Under LH side of dash taped to harness	
C235 (1 pin) .....	Under LH side of dash, near on-board computer	
C236 (2 pin) .....	Under LH side of dash, near on-board computer	
G102 (Main Body Ground) .....	On fender well behind LH headlights .....	203-1
G103 (Engine Ground) (528 i) ..	Above starter on engine block .....	214-1
G103 (Engine Ground) (533 i) ..	Top rear of engine .....	202-1
G301 (Rear Interior Ground) ...	Under LH side of rear seat.....	208-1

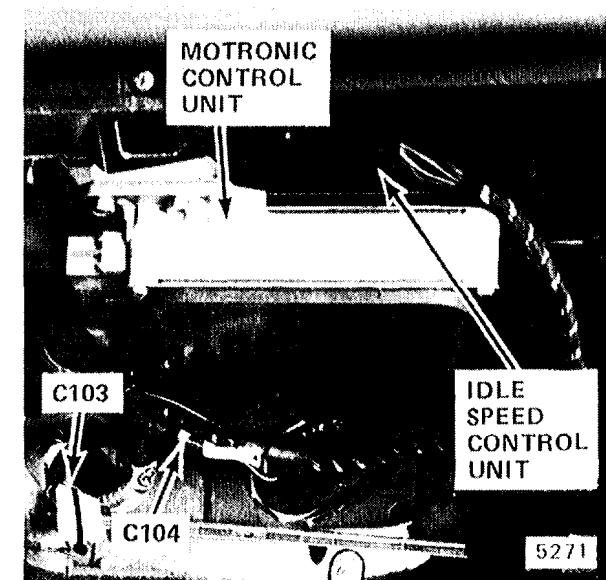


Figure 1 - Below RH Side Of Dash

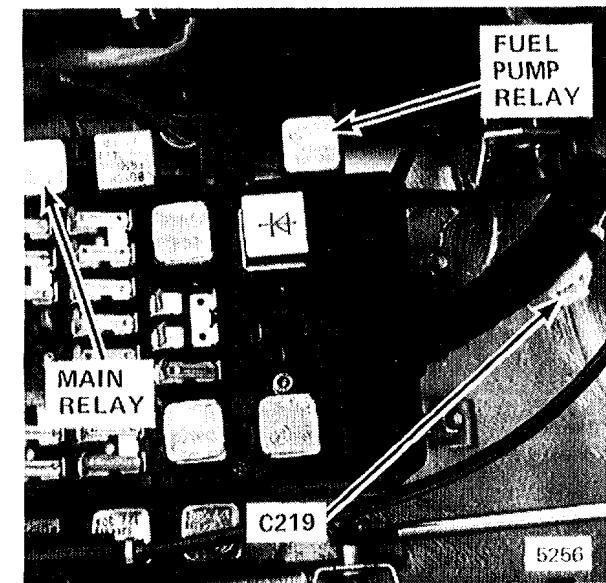


Figure 2 - Top Of LH Front Wheel Well

## HEADLIGHTS (CONTROL/POWER)/FOG LIGHTS (CONTROL/POWER)

Active Check Control Unit.....	Above rear view mirror .....	119-1
Combination Switch .....	On LH side of steering column .....	209-1
Low Beam Check Relay .....	Attached to power distribution box.....	102-1
Power Distribution Box .....	On LH front wheel well .....	102-1
C102 (7 pin) .....	In power distribution box .....	205-1
C107 (2 pin) .....	Behind LH headlights .....	203-1
C108 (2 pin) .....	Behind RH headlights.....	211-1
C202 (13 pin).....	On LH side of steering column .....	203-2
G102 (Main Body Ground) .....	On fender well behind LH headlights .....	203-1
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

## HEATER/AIR CONDITIONING

Blower Speed Switch .....	In center console .....	214-6
Evaporator Blower Motor .....	Under center of dash .....	205-2
Evaporator Blower Resistors ...	On RH side of evaporator housing .....	205-2
Evaporator Temp. Regulator ...	On LH side of heater/evaporator housing .....	214-5
Evaporator Temp. Sensor .....	In evaporator, above evaporator blower motor	
Heater Blower Motor .....	Below windshield, behind cover panel	
Heater Blower Resistors.....	Below heater cover motor	
Heater Regulator .....	Behind A/C selector switch .....	210-1
Heater Temperature Sensor ...	LH side heater/evaporator, near heater core .....	214-5
High Pressure Cut-Out Switch ..	On receiver-drier behind RH headlights .....	207-1
Idle Speed Control Unit.....	Under RH side of dash, above glove box .....	204-1
Interior Temp. Sensor.....	Mounted in left under dash cover .....	213-2
Power Distribution Box .....	On LH front wheel well .....	102-1
Water Shutoff Valve (528 e) ....	Below brake master cylinder	
Water Shutoff Valve (533 i)...	Center rear of engine compartment .....	215-3
C103 (6 pin) .....	RH side of dash near Motronic control unit.....	204-1
C105 (1 pin) (528 e) .....	At RH wheel well, below coolant reservoir .....	212-3
C105 (1 pin) (533 i).....	At RH wheel well, below coolant reservoir .....	
C106 (1 pin) (528 e) .....	Near air conditioning compressor .....	214-4
C106 (1 pin) (533 i).....	Near air conditioning compressor	
C204 (13 pin).....	On LH side of heater/evaporator housing .....	214-5
C205 (6 pin) .....	On RH side of heater/evaporator housing .....	205-2
C214 (6 pin) .....	Behind center of dash, near heater blower	
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

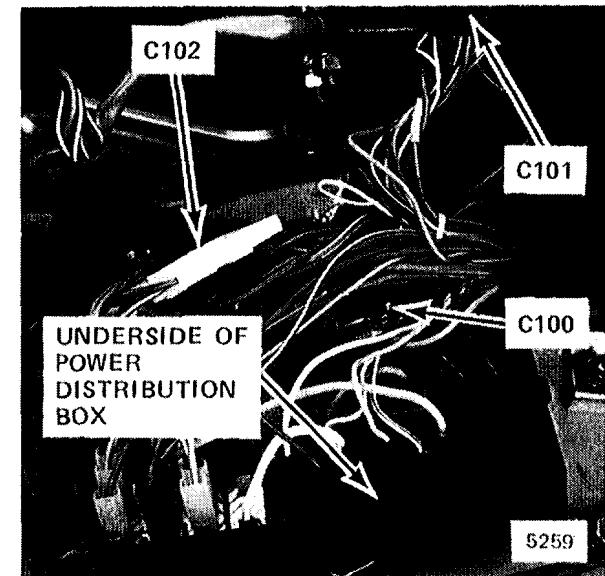


Figure 1 - Top Of LH Front Wheel Well

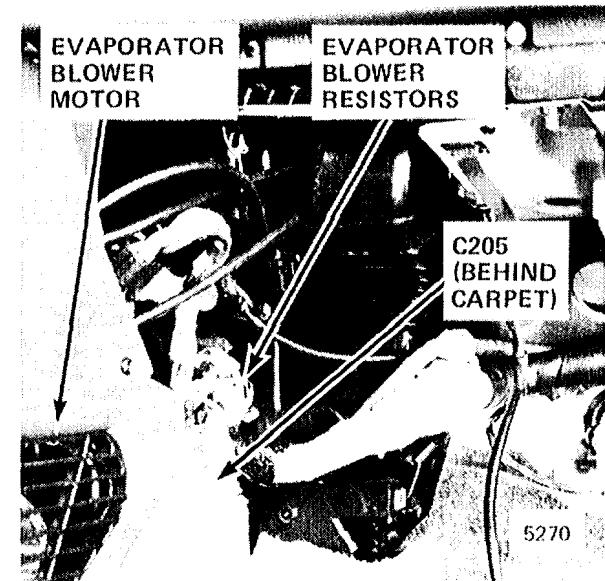


Figure 2 - RH Side Of Upper Console

### HORN/SUNROOF

Horn Brush/Slip Ring .....	Below hub of steering wheel .....	207-2
Horn Switches .....	In each spoke on steering wheel	
Limit Switch .....	Behind header, above rear view mirror	
Motor Relay .....	Behind header, above rear view mirror	
Power Distribution Box .....	On LH front wheel well .....	102-1
Sunroof Drive Motor .....	Behind header, above rear view mirror	
Sunroof Switch .....	Above rear view mirror	
C200 (10 pin) .....	On LH side of steering column	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash	206-1
C302 (accessory connector)....	Under LH side of dash .....	212-1
G102 (Main Body Ground).....	On fender well behind LH headlights.....	203-1
G200 (Front Interior Ground)...	Under LH side of dash, near brake bracket	
G600 .....	Near sun roof switch	

### IDLE SPEED CONTROL

0°C Temperature Switch .....	On right inlet of heater blower housing	
Auto. Trans. Range Switch ....	At base of shift lever .....	215-5
Coolant Temp. Sensor (528 e). .	Front of engine, top of thermostat housing .....	206-2
Coolant Temp. Sensor (533 i) .	Front of engine, top of thermostat housing .....	201-2
Coolant Temp. Switch (528 e) .	Front of engine, top of thermostat housing .....	211-2
Coolant Temp. Switch (533 i) .	Front of engine, back of thermostat housing .....	201-2
Diagnostic Connector (528 e) .	LH side of engine .....	104-1
Diagnostic Connector (533 i) .	Top front of engine .....	104-1
Engine Speed Sensor (528 e) .	On transmission bell housing .....	212-4
Engine Speed Sensor (533 i) .	On transmission bell housing .....	202-1
Idle Control Valve (528 e) ....	Top rear RH side of engine .....	212-3
Idle Control Valve (533 i).....	Top center of engine .....	213-1
Idle Speed Control Unit.....	Under RH side of dash, above glove box .....	204-1
Motronic Control Unit .....	Above glove box .....	204-1
Power Distribution Box .....	On LH front wheel well .....	102-1
Throttle Switch (528 e) .....	Top LH side of engine, below throttle body .....	212-5
Throttle Switch (533 i) .....	Top LH side of engine, below throttle body .....	213-1
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i).....	In power distribution box .....	215-2
C103 (6 pin) .....	RH side of dash near Motronic control unit.....	204-1
C104 (2 pin) .....	RH side of dash near Motronic control unit.....	204-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C301 (2 pin) .....	In center console, ahead of shift lever	
G103 (Engine Ground) (533 i) ..	Above starter on engine block .....	214-1
G103 (Engine Ground) (528 e) ..	Top rear of engine .....	202-1

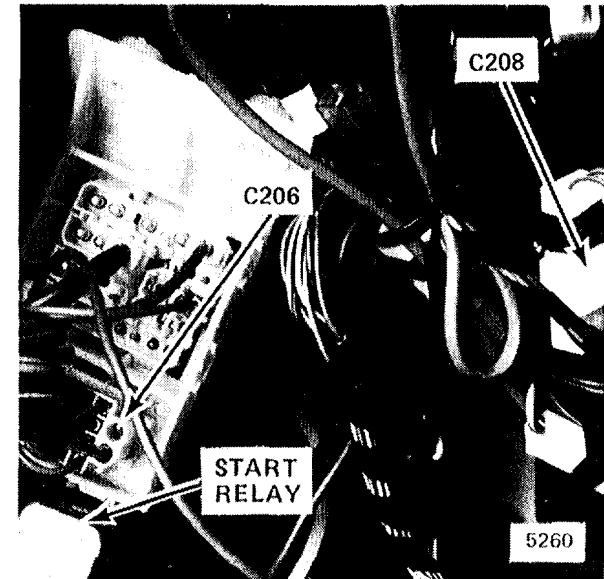


Figure 1 - Lower LH Side Of Dash

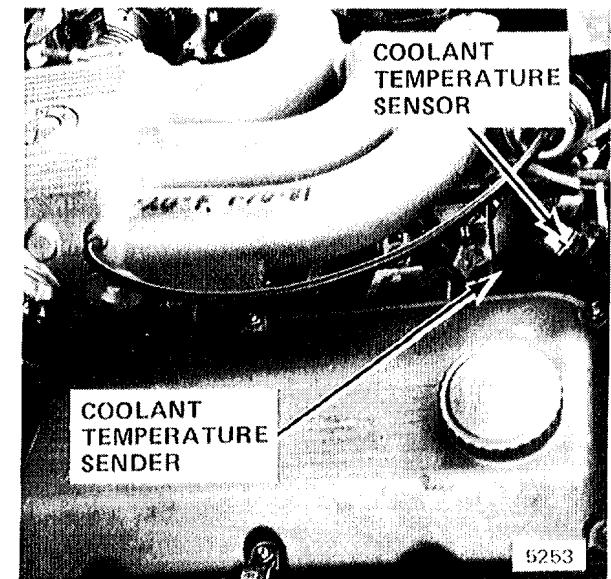
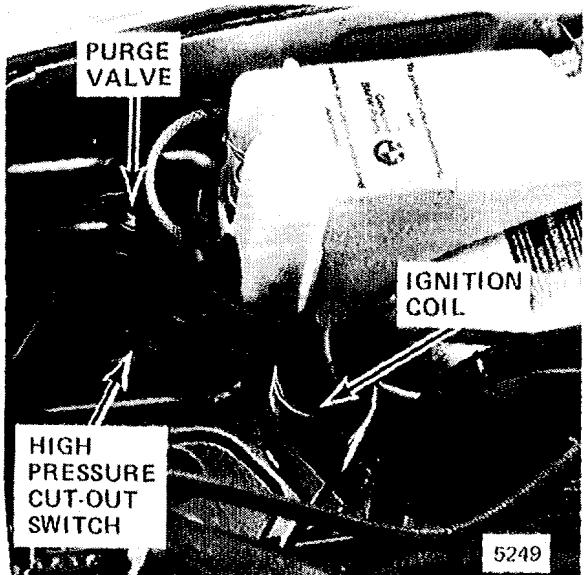


Figure 2 - Top RH Side Of 528e Engine

## **IGNITION**

Diagnostic Connector (528 e)	LH side of engine .....	104-1
Diagnostic Connector (533 i)	Top front of engine .....	104-1
Ignition Coil	On fender well, behind RH headlights .....	207-1
Ignition Switch	Upper part of steering column	
Motronic Control Unit	Above glove box .....	204-1
Power Distribution Box	On LH front wheel well .....	102-1
Reference Point Sensor (528 e)	On transmission bell housing .....	212-4
Reference Point Sensor (533 i)	On transmission bell housing .....	202-1
TDC Sensor	Above crankshaft vibration damper	
C101 (17 pin) (528 e)	In power distribution box .....	205-1
C101 (17 pin) (533 i)	In power distribution box .....	215-2
C200 (10 pin)	On LH side of steering column .....	203-2
G103 (Engine Ground) (528 e)	Above starter on engine block .....	214-1
G103 (Engine Ground) (533 i)	Top rear of engine .....	202-1



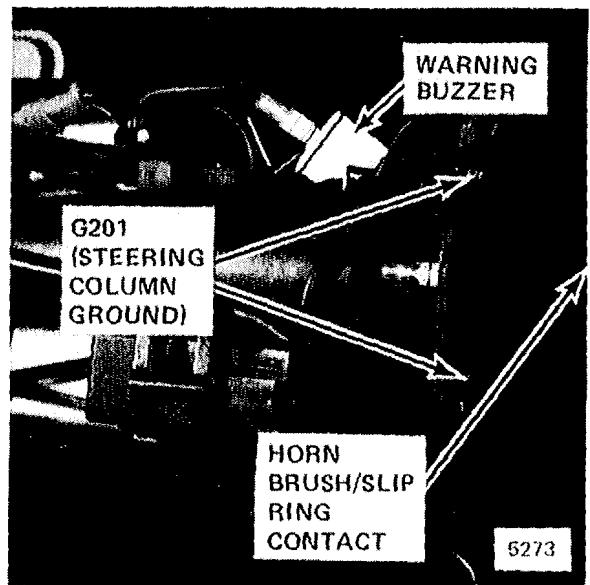
**Figure 1 - Foward Of Washer Reservoir**

## **IGNITION KEY WARNING/SEATBELT WARNING**

Active Check Control Unit	Above rear view mirror .....	119-1
Ignition Key Switch	In upper portion steering column	
Power Distribution Box	On LH front wheel well .....	102-1
Seatbelt Switch	In driver's seatbelt buckle	
Seatbelt Warning Timer	Under LH side of dash .....	212-1
Warning Buzzer	In upper part of steering column .....	207-2
C200 (10 pin)	On LH side of steering column .....	203-2
C203 (2 pin)	At upper end of steering column .....	208-2
C206 (29 pin)	On connector bracket under LH side of dash .....	206-1
G200 (Front Interior Ground)	Under LH side of dash, near brake bracket	

## **INTERIOR LIGHTS**

Ignition Switch	Upper part of steering column	
Interior Light Timer Control	Under LH side of dash .....	212-1
Lock Heater Control Unit	In LH front door .....	213-4
Power Distribution Box	On LH front wheel well .....	102-1
C200 (10 pin)	On LH side of steering column .....	203-2
C206 (29 pin)	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector)	Under LH side of dash .....	212-1
C303 (2 pin)	In headliner, near LH dome light	
C500 (6 pin)	Behind LH front speaker	
C503 (8 pin)	In driver's door driver's door .....	202-2
G200 (Front Interior Ground)	Under LH side of dash, near brake bracket	



**Figure 2 - Upper Part Of Steering Column**

**LIGHTS: DASH/TRANSMISSION RANGE**

Auto. Trans. Range Switch .....	At base of shift lever .....	215-5
Fog Light Switch.....	Under LH side of instrument cluster.....	213-2
Hazard Switch .....	To right of instrument cluster	
Heater-A/C Panel Lights .....	Behind heater-air conditioning control panel	
On-Board Computer .....	Mounted on left under dash cover	
Power Distribution Box .....	On LH front wheel well .....	102-1
C204 (13 pin).....	On LH side of heater/evaporator housing .....	214-5
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
C215 (2 pin) .....	Behind radio	
C301 (2 pin) .....	In center console, ahead of shift lever	
C302 (accessory connector)....	Under LH side of dash .....	212-1
G200 (Front Interior Ground)...	Under LH side of dash, near brake bracket	

**LIGHTS: FRONT PARK/FRONT MARKER/TAIL**

Active Check Control Unit.....	Above rear view mirror .....	119-1
Power Distribution Box .....	On LH front wheel well .....	102-1
Rear Lights Check Relay .....	Mounted on trunk lock support.....	201-1
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
G102 (main body ground) ....	On fender well behind LH headlights .....	203-1
G301 (rear interior ground) ...	Under LH side of rear seat.....	208-1

**LIGHTS: REAR MARKER/LICENSE/TRUNK**

Active Check Control Unit.....	Above rear view mirror .....	119-1
Power Distribution Box .....	On LH front wheel well .....	102-1
Rear Lights Check Relay .....	Mounted on trunk lock support.....	201-1
Trunk Light Switch .....	In trunk lid near trunk lock	
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
C300 (2 pin) .....	Near trunk light	
C302 (accessory connector)....	Under LH side of dash .....	212-1
G301 (Rear Interior Ground) ...	Under LH side of rear seat.....	208-1

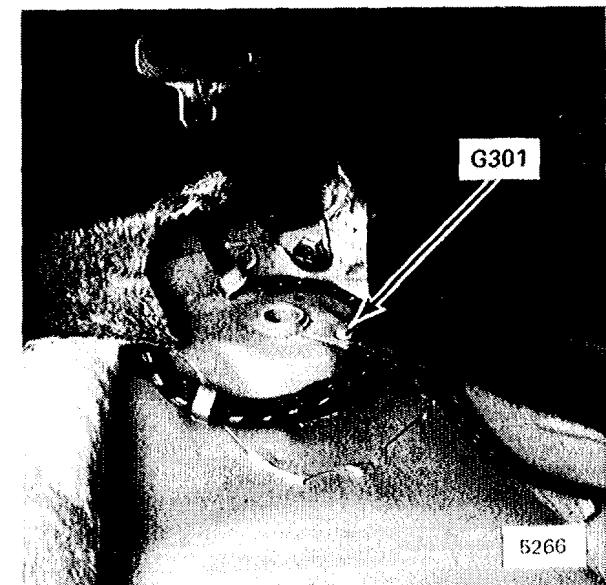


Figure 1 - Under LH Rear Seat

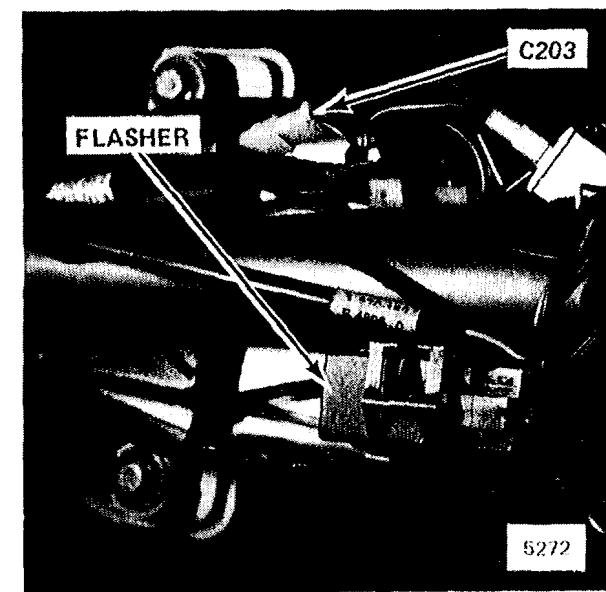


Figure 2 - Upper Part Of Steering Column

## LIGHTS TURN/HAZARD WARNING

Combination Switch .....	On LH side of steering column .....	209-1
Flasher .....	Upper part of steering column.....	208-2
Hazard Switch .....	To right of instrument cluster	
Power Distribution Box .....	On LH front wheel well .....	102-1
C102 (7 pin) .....	In power distribution box .....	205-1
C202 (13 pin) .....	On LH side of steering column .....	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
G102 (Main Body Ground) ....	On fender well behind LH headlights .....	203-1
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket	
G201 (Steering Column Ground)	Upper part of steering column.....	207-2
G301 (Rear Interior Ground) ..	Under LH side of rear seat.....	208-1

## ON-BOARD COMPUTER

Alarm Horn .....	Behind battery .....	215-4
Chime .....	Mounted on left under dash cover	
Filter Capacitor .....	Behind battery .....	215-4
Ignition Switch.....	Upper part of steering column	
Main Relay .....	On power distribution box .....	102-1
On-Board Computer .....	Mounted on left under dash cover	
Outside Temp. Sensor .....	Under front bumper, left side	
Power Distribution Box .....	On LH front wheel well .....	102-1
C103 (6 pin) .....	RH side of dash near Motronic control unit.....	204-1
C200 (10 pin) .....	On LH side of steering column .....	203-2
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C212 (1 pin) .....	Under LH side of dash taped to harness	
C219 (3 pin) .....	Taped to harness, near power distribution box	204-2
C235 (1 pin) .....	Under LH side of dash, near on-board computer	
C236 (2 pin) .....	Under LH side of dash, near on-board computer	
C242 (2 pin) .....	Ahead of on-board computer	
C250 (1 pin) .....	Under left side of dash, near on-board computer	
C251 (1 pin) .....	Behind battery .....	215-4
C302 (accessory connector)...	Under LH side of dash .....	212-1
G102 (Main Body Ground) ....	On fender well behind LH headlights .....	203-1
G103 (Engine Ground) (528 e) ..	Above starter on engine block.....	214-1
G103 (Engine Ground) (533 i) ..	Top rear of engine .....	202-1
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket	

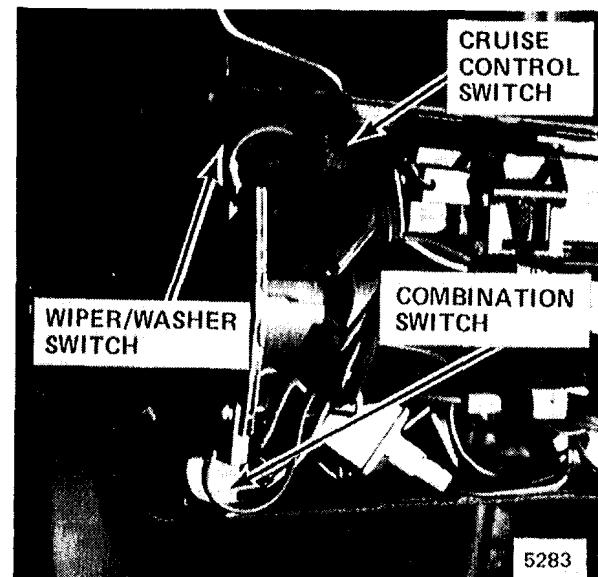


Figure 1 - Upper Part Of Steering Column

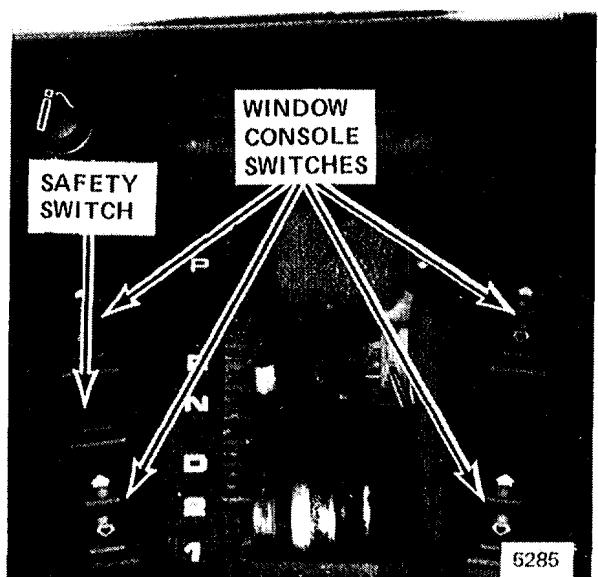


Figure 2 - Shift Console Near Shift Lever

## POWER DISTRIBUTION

Combination Switch .....	On LH side of steering column .....	209-1
Diagnostic Connector (528 e) ..	LH side of engine .....	104-1
Diagnostic Connector (533 i) ..	Top front of engine .....	104-1
Ignition Switch.....	Upper part of steering column	
Low Beam Check Relay .....	Attached to power distribution box .....	102-1
Power Distribution Box .....	On LH front wheel well .....	102-1
Starter .....	Lower rear LH side of engine	
C200 (10 pin).....	On LH side of steering column .....	203-2
C202 (13 pin).....	On LH side of steering column .....	203-2
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector)...	Under LH side of dash .....	212-1
G102 (Main Body Ground) .....	On fender well behind LH headlights .....	203-1

## POWER MIRRORS

Mirror Control Switch .....	On driver's door	
Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
C500 (6 pin) .....	Behind LH front speaker	
C501 (4 pin) .....	Behind LH front speaker	
C502 (4 pin) .....	Behind RH front speaker .....	213-3
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

## POWER WINDOWS

Power Distribution Box .....	On LH front wheel well .....	102-1
Power Window Circuit Brkr ...	Mounted in left under dash cover .....	213-6
Power Window Relay .....	Under LH side of dash .....	102-1
Safety Switch .....	On shift console .....	209-2
Window Console Switches ....	On shift console .....	209-2
Window Motors .....	In each door	
C206 (29 pin).....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector)...	Under LH side of dash .....	212-1
C400 (13 pin).....	Behind RH front speaker	
C401 (13 pin).....	Behind RH front speaker .....	213-3
C402 (6 pin) .....	At LH rear door grommet	
C403 (6 pin) .....	At RH rear door grommet	
C500 (6 pin) .....	Behind Left front speaker	
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

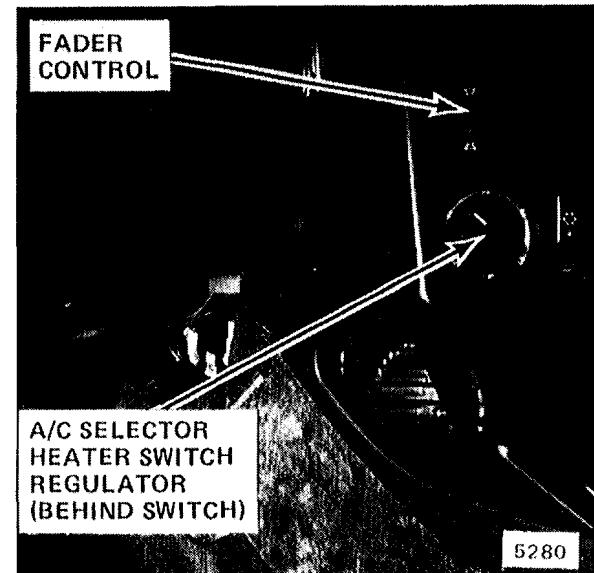


Figure 1 - Upper Console Below Dash



Figure 2 - RH Side Of Oil Pan

## RADIO/POWER ANTENNA

Fader Control .....	In upper part of center console .....	210-1
Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C215 (2 pin) .....	Behind radio	
C216 (2 pin) .....	Behind radio	
C217 (2 pin) .....	Behind radio	
C218 (2 pin) .....	Behind radio	
C302 (accessory connector) ...	Under LH side of dash .....	212-1
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

## REAR DEFOGGER/HEATER DOOR LOCK

Lock Heater Control Unit .....	In LH front door .....	213-4
Lock Heater .....	In LH front door	
Power Distribution Box .....	On LH front wheel well .....	102-1
C206 (29 pin) .....	On connector bracket under LH side of dash .....	206-1
C302 (accessory connector) ...	Under LH side of dash .....	212-1
C500 (6 pin) .....	Behind LH front speaker	
C503 (8 pin) .....	In driver's door .....	202-2
C560 (2 pin) .....	In LH front door	
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	
G301 (Rear Interior Ground) ...	Under LH side of rear seat.....	208-1

## SERVICE INTERVAL INDICATOR

Coolant Temp. Sender (528 e). Front of engine, on thermostat housing .....	206-2	
Coolant Temp. Sender (533 i). Front of engine, on thermostat housing .....	201-2	
Diagnostic Connector (528 e). LH side of engine .....	104-1	
Diagnostic Connector (533 i).. Top front of engine .....	104-1	
Motronic Control Unit .....	Above glove box .....	
Power Distribution Box .....	On LH front wheel well .....	102-1
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i).....	In power distribution box .....	215-2
C103 (6 pin) .....	RH side of dash near Motronic control unit.....	204-1
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	

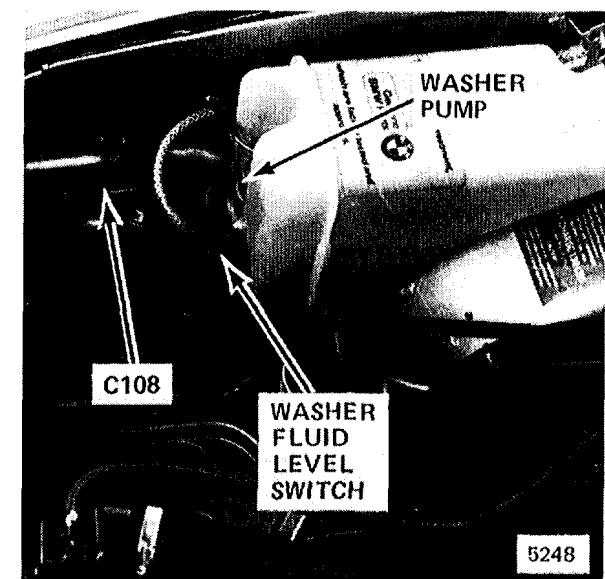


Figure 1 - Forward Of Washer Reservoir

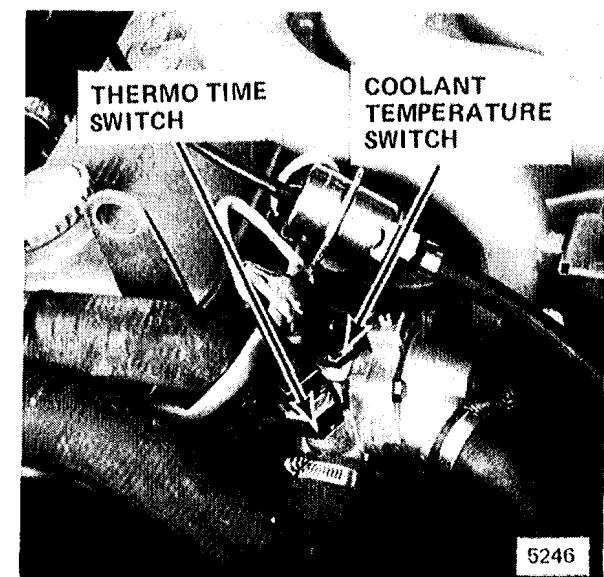


Figure 2 - Top Front Of 528e Engine

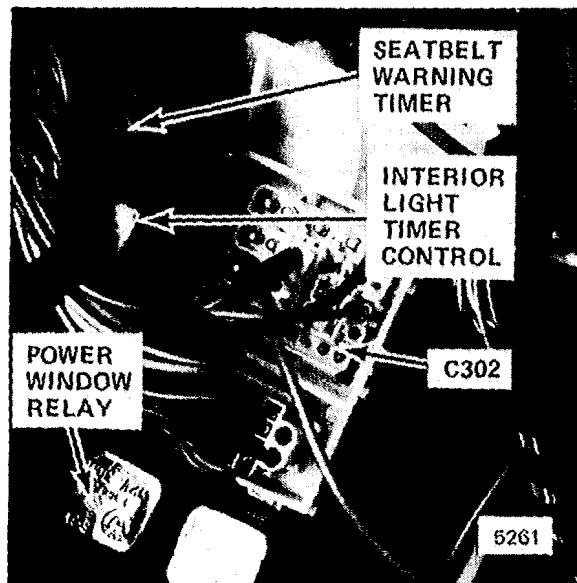


Figure 1 - Lower LH Side Of Dash

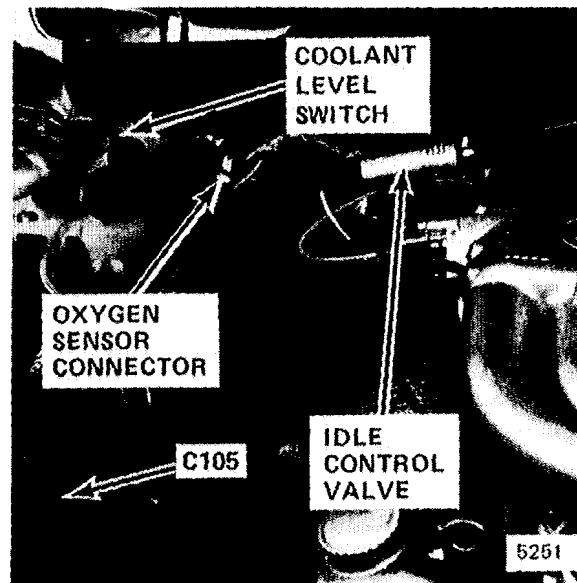


Figure 3 - Left Of 528e RH Front Wheel Well



Figure 5 - Below Throttle Of 528e Engine

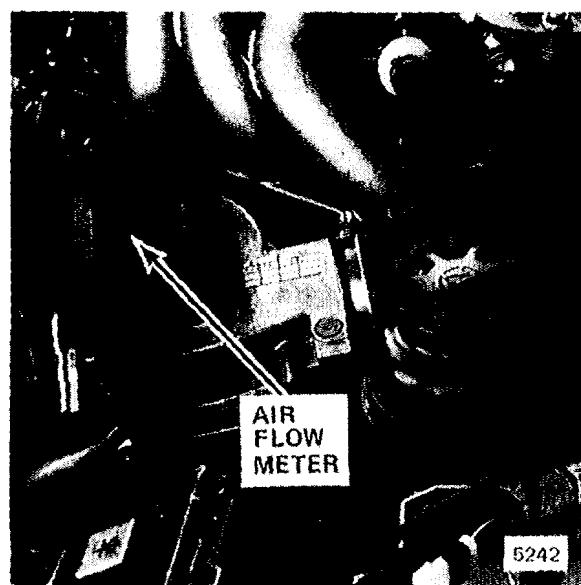


Figure 2 - Top Front LH Side Of 528e Engine

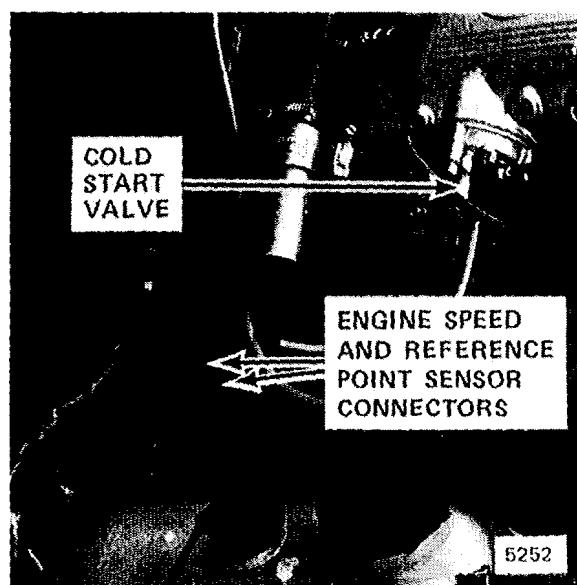


Figure 4 - RH Rear Side Of 528e Engine



Figure 6 - Left Of 533i RH Front Wheel Well

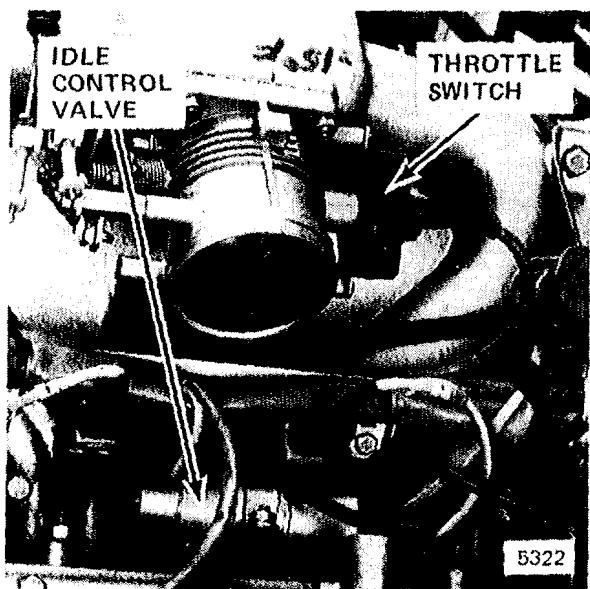


Figure 1 - Top Center Of 533i Engine

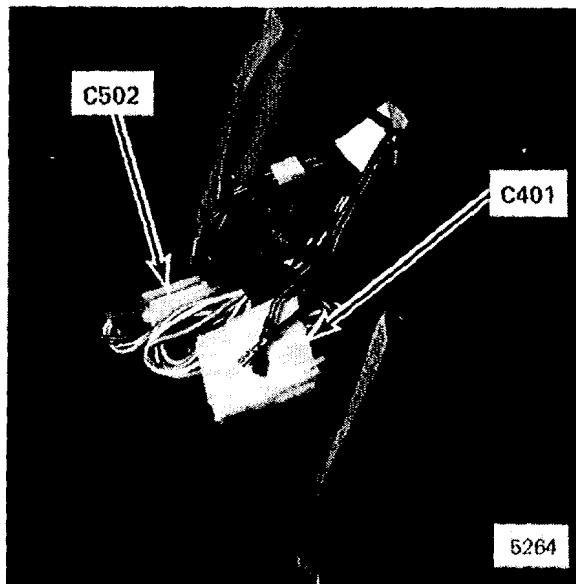


Figure 3 - Behind Right Front Speaker

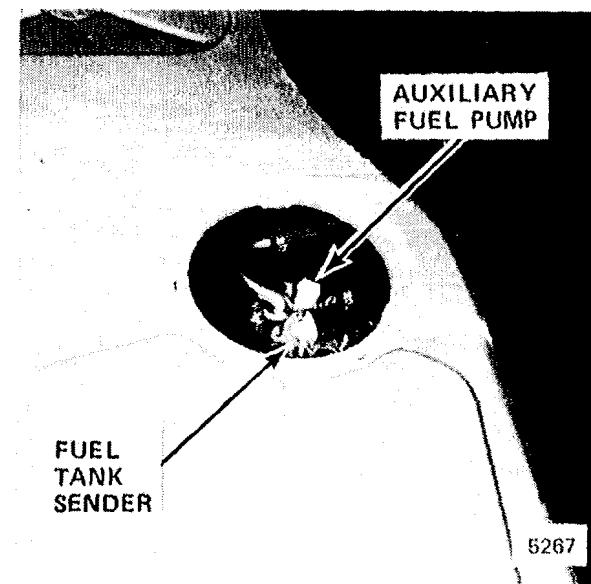


Figure 5 - Bottom RH Side Of Trunk

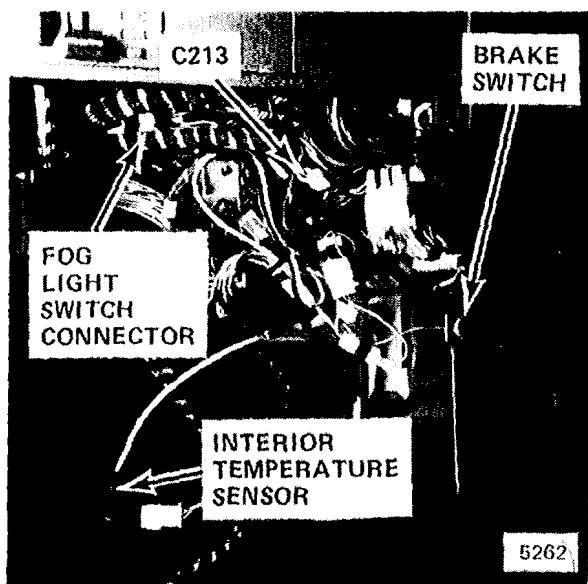


Figure 2 - Lower LH Side Of Dash

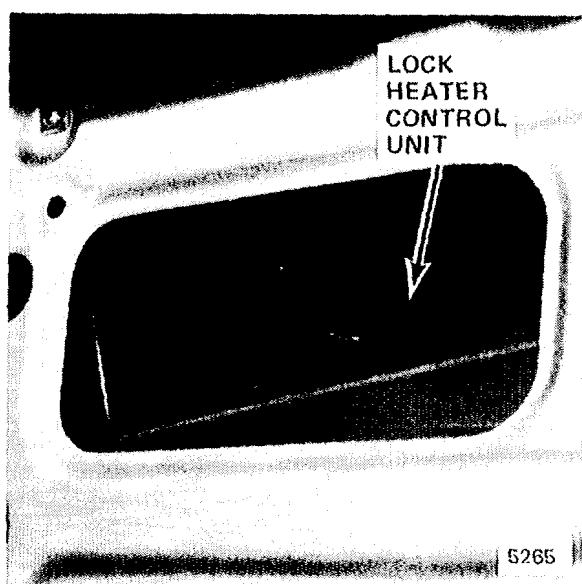


Figure 4 - Inside Driver's Door



Figure 6 - Left Of Upper Console

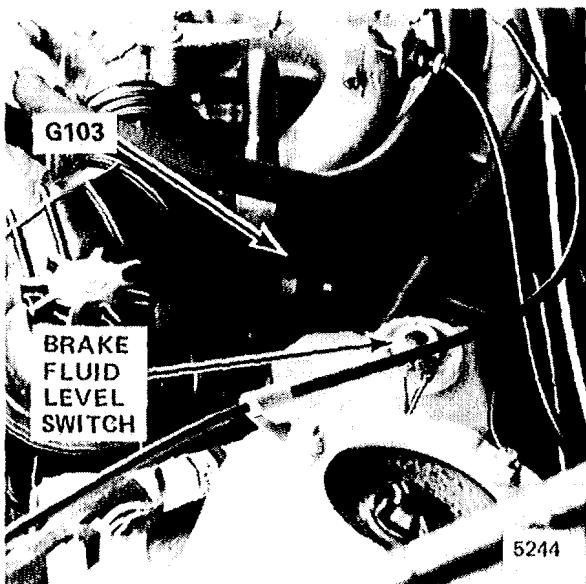


Figure 1 - LH Rear Of Side Of 528e Engine

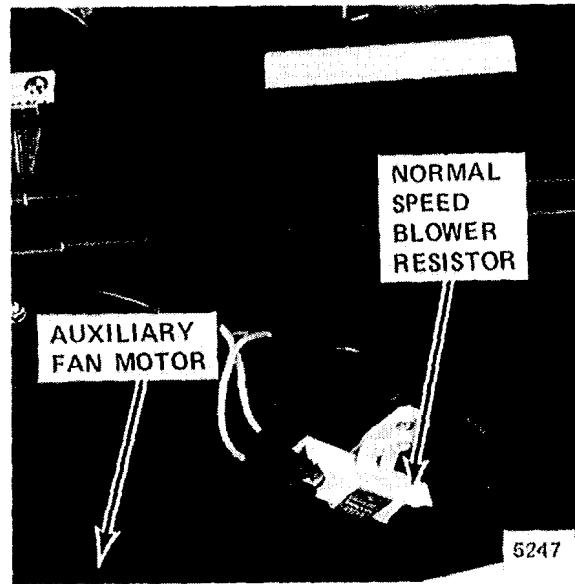


Figure 3 - Forward Of Radiator

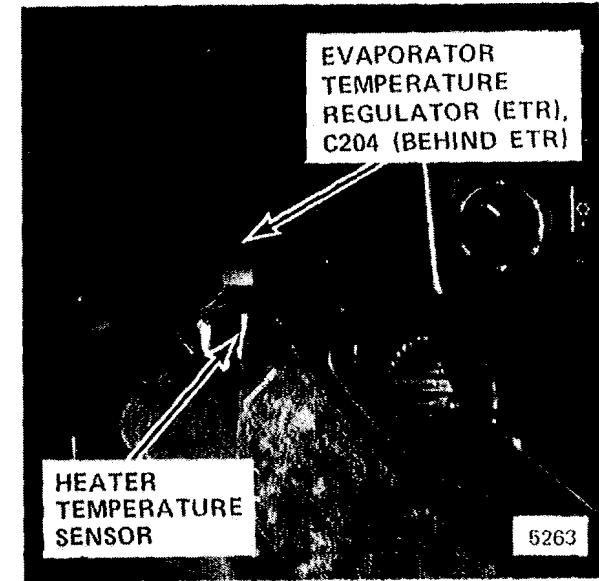


Figure 5 - LH Side Of Upper Console

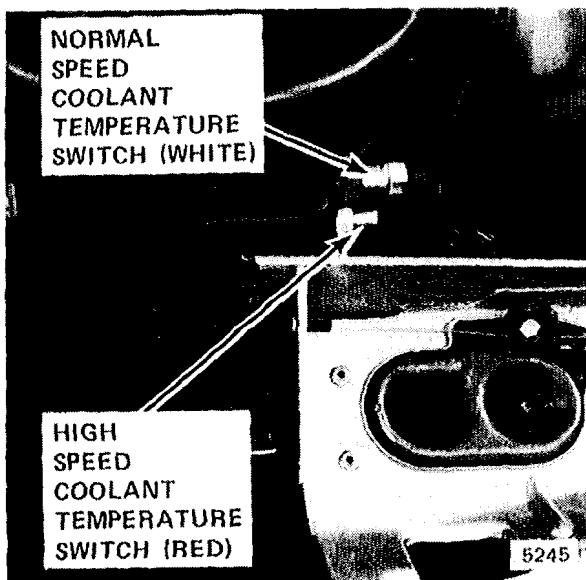


Figure 2 - LH Side Of Radiator

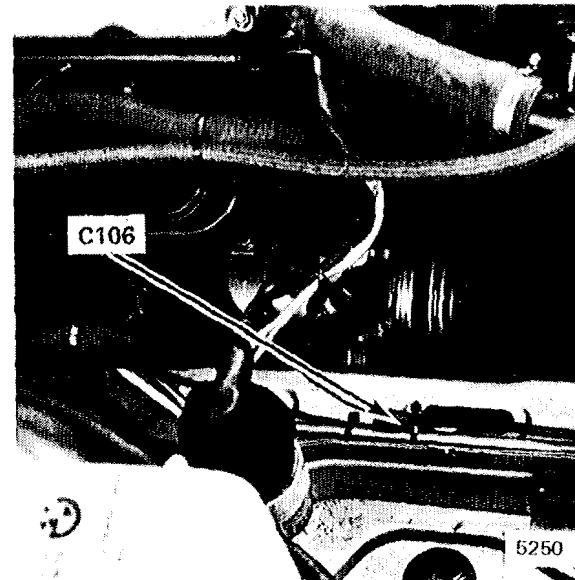


Figure 4 - Below Washer Reservoir Of 528e

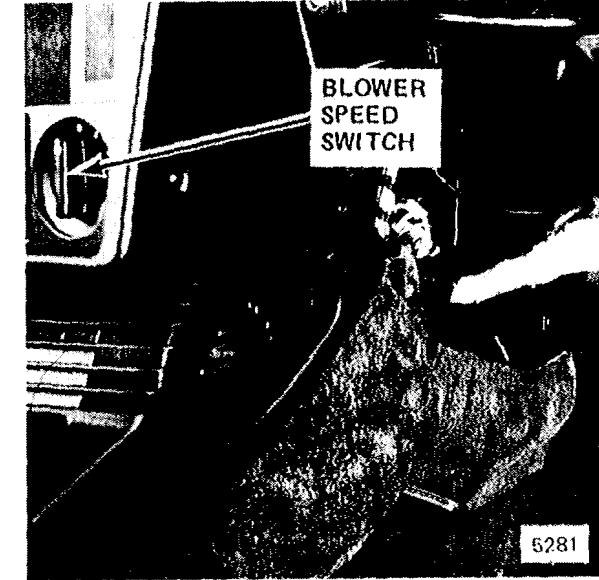


Figure 6 - RH Side Of Upper Console



Figure 1 - LH Rear Side Of 533i Engine

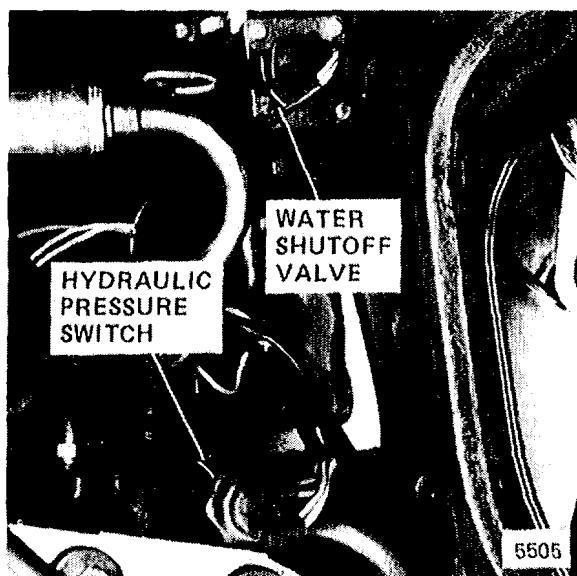


Figure 3 - Front Of LH Wheel Well



Figure 5 - Console, At Gear Shift Selector

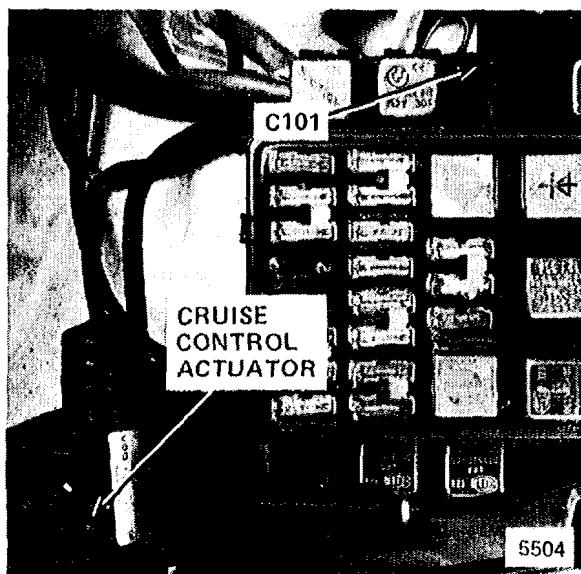


Figure 2 - LH Rear Side Of 533i Engine

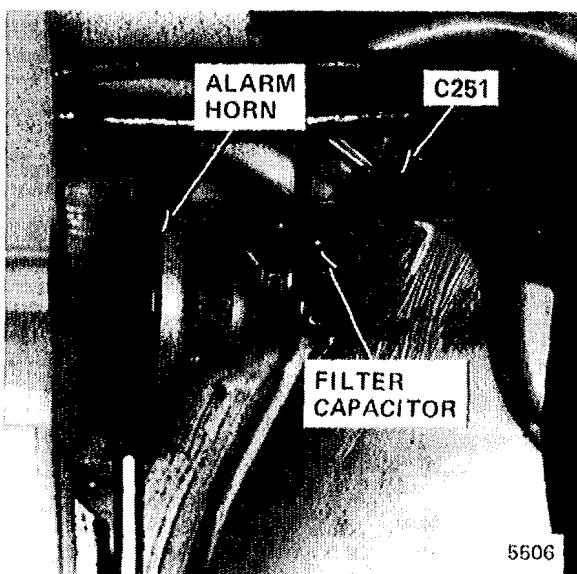


Figure 4 - Behind Battery

### SPEEDOMETER/GAUGES/WARNING INDICATORS

Active Check Control Unit.....	Above rear view mirror .....	119-1
Brake Accumulator Pres. Switch	Right of left front shock tower .....	215-1
Brake Fluid Level Switch (528e)	LH rear of engine, on brake fluid reservoir .....	214-1
Brake Fluid Level Switch (533 i)	LH rear of engine, on brake fluid reservoir .....	215-1
Coolant Temp. Sender (528 e)	Front of engine, on thermostat housing .....	206-2
Coolant Temp. Sender (533 i)	Front of engine, on thermostat housing .....	201-2
Diagnostic Connector (528 e)	LH side of engine .....	104-1
Diagnostic Connector (533 i)	Top front of engine .....	104-1
Fuel Tank Sender .....	Under trunk, top RH side of fuel tank .....	213-5
Hydraulic Pressure Switch.....	Right of left front shock tower .....	215-3
Ignition Switch.....	Upper part of steering column	
Motronic Control Unit .....	Above glove box .....	204-1
Oil Pressure Switch .....	RH side of engine, below oil filter .....	210-2
Parking Brake Switch .....	In shift console at base of parking brake	
Power Distribution Box .....	On LH front wheel well .....	102-1
Speedometer Sender .....	In rear of differential	
C101 (17 pin) (528 e)	In power distribution box .....	205-1
C101 (17 pin) (533 i)	In power distribution box .....	215-2
C103 (6 pin) .....	RH side of dash near Motronic control unit.....	204-1
C200 (10 pin).....	On LH side of steering column .....	203-2
G200 (Front Interior Ground) ...	Under LH side of dash, near brake bracket	
G301 (Rear Interior Ground) ...	Under LH side of rear seat.....	208-1

**START**

Auto. Trans. Range Switch ....	At base of shift lever .....	215-5
Cold Start Valve (528 e)....	RH side of engine.....	212-4
Cold Start Valve (533 i) .....	Between intake ports 3 and 4	
Diagnostic Connector (528 e)	LH side of engine .....	104-1
Diagnostic Connector (533 i)	Top front of engine .....	104-1
Ignition Switch.....	Upper part of steering column	
Power Distribution Box .....	On LH front wheel well.....	102-1
Start Relay .....	On connector bracket under LH side of dash .....	206-1
Starter .....	Lower rear LH side of engine	
Thermo-Time Switch (533 i) ...	Front of engine, top of thermostat housing .....	201-2
Thermo-Time Switch (528 e) ..	Front of engine, top of thermostat housing .....	211-2
C101 (17 pin) (528 e) .....	In power distribution box .....	205-1
C101 (17 pin) (533 i).....	In power distribution box .....	215-2
C200 (10 pin).....	On LH side of steering column .....	203-2
C213 (1 pin) .....	Near start relay under LH side of dash .....	213-2
G102 (Main Body Ground) ...	On fender well behind LH headlights .....	203-1
G200 (Front Interior Ground)..	Under LH side of dash, near brake bracket	

**WIPER/WASHER**

Power Distribution Box .....	On LH front wheel well .....	102-1
Washer Jet Heaters .....	On washer jet nozzles	"
Washer Pump .....	Forward of RH front wheel well, in reservoir .....	211-1
Wiper Motor.....	Above brake master cylinder	
Wiper/Washer Switch .....	On RH side of steering column .....	209-1
C102 (7 pin) .....	In power distribution box .....	205-1
C110 (2 pin) .....	Near washer pump	
C201 (6 pin) .....	On LH side of steering column .....	203-2
G200 (Front Interior Ground) ..	Under LH side of dash, near brake bracket	
G201 (Steering Column Ground)	Upper part of steering column.....	207-2